SHARP SERVICE MANUAL

S26R5LC20D30U

LCD COLOR TELEVISION

MODEL LC-20D30U

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

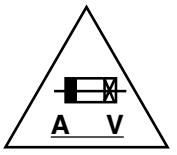
This document has been published to be used for after sales service only.
The contents are subject to change without notice.

IMPORTANT SERVICE SAFETY PRECAUTION

■ **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:**

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.



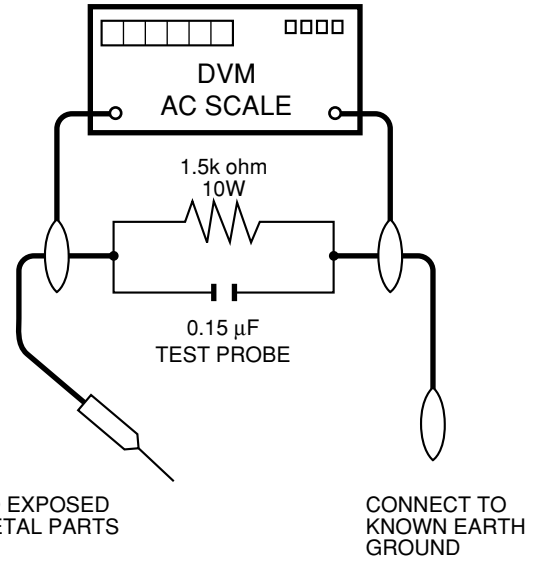
CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE REPLACE ONLY WITH SAME TYPE F7701 (3.15A, 250V) AND F7702 (5A, 250V) FUSE.

BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

Before returning the receiver to the user, perform the following safety checks:

1. Inspect all lead dress to make certain that leads are not pinched, and check that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC cord directly into a 110~240 volt AC outlet, and connect the DC power cable into the receiver's DC jack. (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to an earth ground.
- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.
  All checks must be repeated with the AC cord plug connection reversed. (If necessary, a nonpolarized adaptor plug must be used only for the purpose of completing these checks.)
  Any reading of 0.75V peak (this corresponds to 0.5 mA. peak AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the monitor to the owner.



SAFETY NOTICE

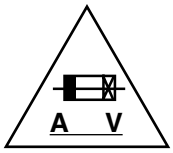
Many electrical and mechanical parts in LCD television have special safety-related characteristics.
These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the ***Replacement Parts Lists*** and ***Schematic Diagrams***.
For continued protection, replacement parts must be identical to those used in the original circuit.
The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

PRECAUTIONS A PRENDRE LORS DE LA REPARATION

■ **Ne peut effectuer la réparation qu' un technicien spécialisé qui s'est parfaitement accoutumé à toute vérification de sécurité et aux conseils suivants.**

AVERTISSEMENT

1. N'entreprendre aucune modification de tout circuit. C'est dangereux.
2. Débrancher le récepteur avant toute réparation.



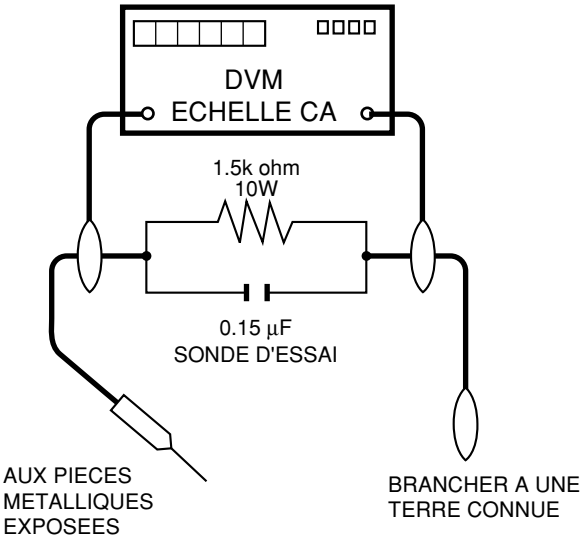
PRECAUTION: POUR LA PROTECTION CONTINUE CONTRE LES RISQUES D'INCENDIE, REMPLACER LE FUSIBLE PAR UN FUSIBLE DE MEME TYPE F7701 (3.15A, 250V) UND F7702 (5A, 250V).

VERIFICATIONS CONTRE L'INCEN-DIE ET LE CHOC ELECTRIQUE

Avant de rendre le récepteur à l'utilisateur, effectuer les vérifications suivantes.

1. Inspecter tous les faisceaux de câbles pour s'assurer que les fils ne soient pas pincés ou qu'un outil ne soit pas placé entre le châssis et les autres pièces métalliques du récepteur.
2. Inspecter tous les dispositifs de protection comme les boutons de commande non-métalliques, les isolants, le dos du coffret, les couvercles ou blindages de réglage et de compartiment, les réseaux de résistance-capacité, les isolateurs mécaniques, etc.
3. S'assurer qu'il n'y ait pas de danger d'électrocution en vérifiant la fuite de courant, de la facon suivante:

- Brancher le cordon d'alimentation directem-ent à une prise de courant de 110-240V. (Ne pas utiliser de transformateur d'isolation pour cet essai).
- A l'aide de deux fils à pinces, brancher une résistance de 1.5kΩ 10 watts en parallèle avec un condensateur de 0.15µF en série avec toutes les pièces métalliques exposées du coffret et une terre connue comme une conduite électrique ou une prise de terre branchée à la terre.
- Utiliser un voltmètre CA d'une sensibilité d'au moins 5000Ω/V pour mesurer la chute de tension en travers de la résistance.
- Toucher avec la sonde d'essai les pièces métalliques exposées qui présentent une voie de retour au châssis (antenne, coffret métallique, tête des vis, arbres de commande et des boutons, écusson, etc.) et mesurer la chute de tension CA en travers de la résistance. Toutes les vérifications doivent être refaites après avoir inversé la fiche du cordon d'alimentation. (Si nécessaire, une prise d'adpatation non polarisée doit être utilisée dans le but de terminer ces vérifications.)
  La tension de pointe mesurèe ne doit pas dépasser 0.75V (correspondante au courant CA de pointe de 0.5mA). Dans le cas contraire, il y a une possibilité de choc électrique qui doit être supprimée avant de rendre le récepteur au client.



AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les téléviseurs présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue. Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.
Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont identifiées par la marque " ⚠ " et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques.
Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies, radiations X ou autres accidents.

Precautions for using lead-free solder

1 Employing lead-free solder

"All PWBs" of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.

Example:

Indicates lead-free solder of tin, silver and copper.

2 Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40°C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

3 Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40°C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required.

If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

Part No.	★	Description		Code
ZHNDAi123250E	J	ϕ0.3mm	250g(1roll)	BL
ZHNDAi126500E	J	ϕ0.6mm	500g(1roll)	BK
ZHNDAi12801KE	J	ϕ1.0mm	1kg(1roll)	BM

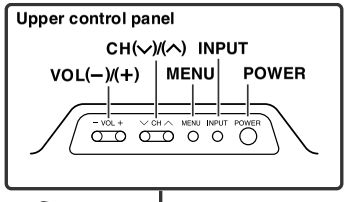
SPECIFICATIONS

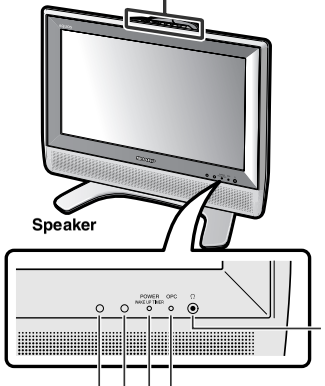
Items / Model		LC-20D30U
LCD panel		20" Advanced Super View & BLACK TFT LCD
Number of dots		3,147,264 dots WXGA
Video color systems		N358, N443, PAL, PAL-M, PAL-N, SECAM, PAL-60
TV function	TV Standard (CCIR)	NTSC/PAL-M/PAL-N
	TV Tuning System	PLL 181 ch.
	STEREO	MTS+SAP
	CATV	125 ch.
Y/C FILTER		3D Y/C FILTER
Brightness		480 cd/m^2
Viewing angles		H: 170° V: 170°
Audio amplifier		2.1 W × 2
Speakers		$1\frac{37}{64} \times 4\frac{21}{64}$ in. (4 × 11 cm), 2 pcs.
Terminals	INPUT1	AUDIO-IN, COMPONENT-IN
	INPUT2	AUDIO-IN, VIDEO-IN, S-VIDEO-IN
	INPUT3/OUTPUT	AUDIO-IN, VIDEO-IN/AUDIO-OUT, VIDEO-OUT
	INPUT4	HDMI-IN with HDCP (640 × 480, 480P, 576P, 720P, 1080I)
	INPUT5	PC Connector: 15-pin mini D-sub PC AUDIO: Mini-jack for stereo (ø3.5 mm)
	Antenna	F-Type
	Headphone	Mini-jack for stereo (ø3.5 mm)
OSD language		English/Spanish/French
Power supply		AC 110-240V, 50/60Hz
Power consumption		77 W (0.6 W standby): AC 120V
Weight	Display only	15.5 lbs./7.0 kg
	Display with stand	17.5 lbs./7.9 kg
Operating temperature		+32°F to +104°F (0°C to +40°C)

■ As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for the LCD TV set improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Part Names of the Main Unit

Controls



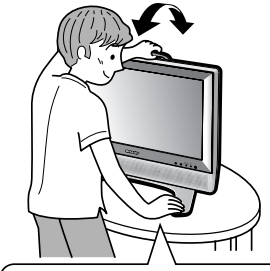


Headphone jack (∩)
Plug the headphone mini-plug into the headphone jack located on the front of the main unit.

OPC (Optical Picture Control) indicator
The OPC indicator lights up green when "OPC" is set to "ON".

POWER/WAKE UP TIMER indicator
POWER/WAKE UP TIMER indicator lights up green when the power is on, and red when in the standby mode (the indicator will not light when the main power is off), and orange when the wake up timer is set (the indicator will light when in the standby mode).

■ How to adjust the angle



Tilt the display by grabbing onto the carrying handle while securely holding down the stand with your other hand.

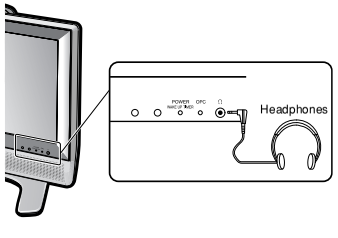
To change the vertical angle of the LCD TV set, tilt the screen up to 2.5 degrees forward or 10 degrees backward. Please adjust the angle so that the LCD TV set can be watched most comfortably.

NOTE

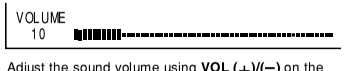
- **INPUT, CH (∨)/(∧), VOL (−)/(+)** and **MENU** on the main unit have the same functions as the same buttons on the remote control. Fundamentally, this operation manual provides a description based on operation using the remote control.

Listening with Headphones

■ Plug the headphone mini-plug into the headphone jack located on the front of the main unit.



▼ **On-screen display**

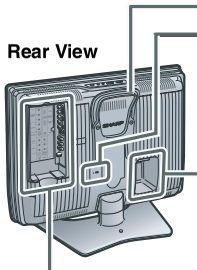


Adjust the sound volume using **VOL (+)/(−)** on the remote control.

NOTE

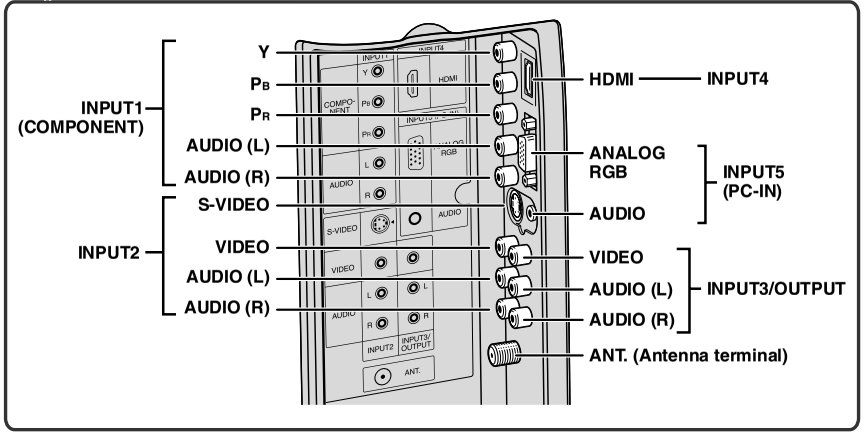
- Headphones are not included in the supplied accessories.
- No sound is heard from the main unit speakers when a headphone mini-plug is connected into the headphone jack.
- Do not set the volume at a high level. Hearing experts advise against extended listening at high volume levels.

Terminals



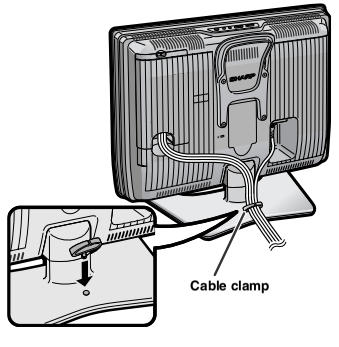
*** Using the Kensington Lock**

- This LCD TV set has a Kensington Security Standard slot for use with a Kensington MicroSaver Security System. Refer to the information that came with the system for instructions on how to use it to secure the LCD TV set.

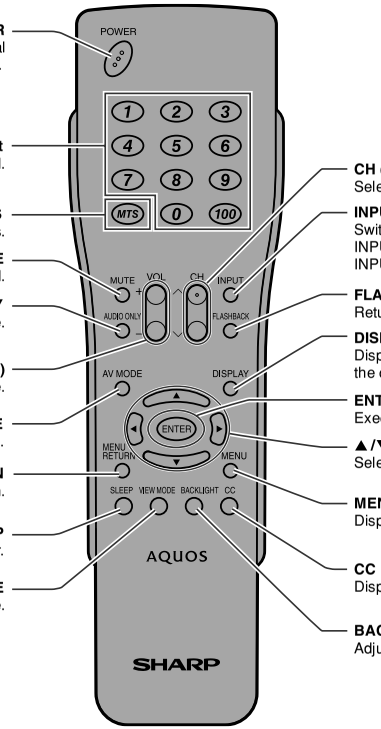


How to Fix the Cables

Secure cables and cords with the supplied cable clamp so that they do not get caught when mounting the cover.



Part Names of the Remote Control



POWER
Switches the Liquid Crystal Television power on or standby.

Channel Select
Sets the channel.

MTS
Selects audio settings.

MUTE
Mutes the sound.

AUDIO ONLY
Outputs audio without screen image.

VOL (+)/(–)
Sets the volume.

AV MODE
Selects preferred AV MODE.

MENU RETURN
Returns to the previous screen.

SLEEP
Sets the sleep timer.

VIEW MODE
Selects the screen size.

CH (∧)/(∨)
Selects a channel.

INPUT
Switches the input source between INPUT1, INPUT2, INPUT3, INPUT4, INPUT5 (PC) and TV mode.

FLASHBACK
Returns to the previous channel.

DISPLAY
Displays the receiving channel and the current time for 10 seconds.

ENTER
Executes a command.

▲/▼/◀/▶ (Cursor control)
Selects a desired item on the screen.

MENU
Displays the menu screen.

CC
Displays Closed Caption subtitles.

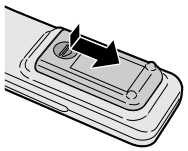
BACKLIGHT
Adjusts the brightness of the screen.

Preparation

Installing Batteries in the Remote Control

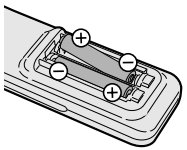
Before using the LCD TV set for the first time, install the two "AAA" size batteries supplied in the remote control. When the batteries become depleted and the remote control fails to operate, replace the batteries with new "AAA" size batteries.

1 Open the battery cover.



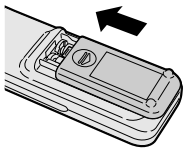
■ Slide the cover while pressing the ( ) part.

2 Insert two "AAA" size batteries.



■ Place batteries with their terminals corresponding to the (+) and (–) indications in the battery compartment.

3 Close the battery cover.



■ Engaging the lower claw with the remote control, close the cover.

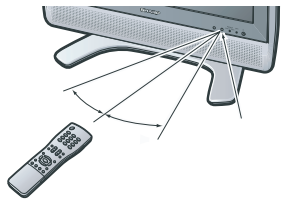
⚠ Caution!

Precautions regarding batteries

■ Improper use of batteries can result in a leakage of chemicals and/or explosion. Be sure to follow the instructions below.
- Place batteries with their terminals corresponding to the (+) and (–) indications.
- Different types of batteries have different characteristics. Do not mix batteries of different types.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries and/or cause old batteries to leak chemicals.
- Remove batteries as soon as they are depleted. Chemicals that leak from batteries can cause a rash. If chemical leakage is found, wipe it off with a cloth.
- The batteries supplied with the LCD TV set may have a shorter operating time due to storage conditions.
- If the remote control is not to be used for a long period of time, remove the batteries from the remote control.

Using the Remote Control

■ Use the remote control by pointing it towards the remote sensor window of the main unit. Objects between the remote control and sensor window may prevent proper operation.

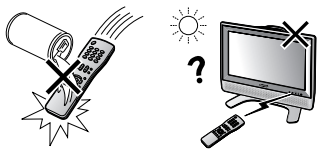


Cautions regarding use of the remote control

■ Do not apply shock to the remote control. In addition, do not expose the remote control to liquids, and do not place it in an area with high humidity.

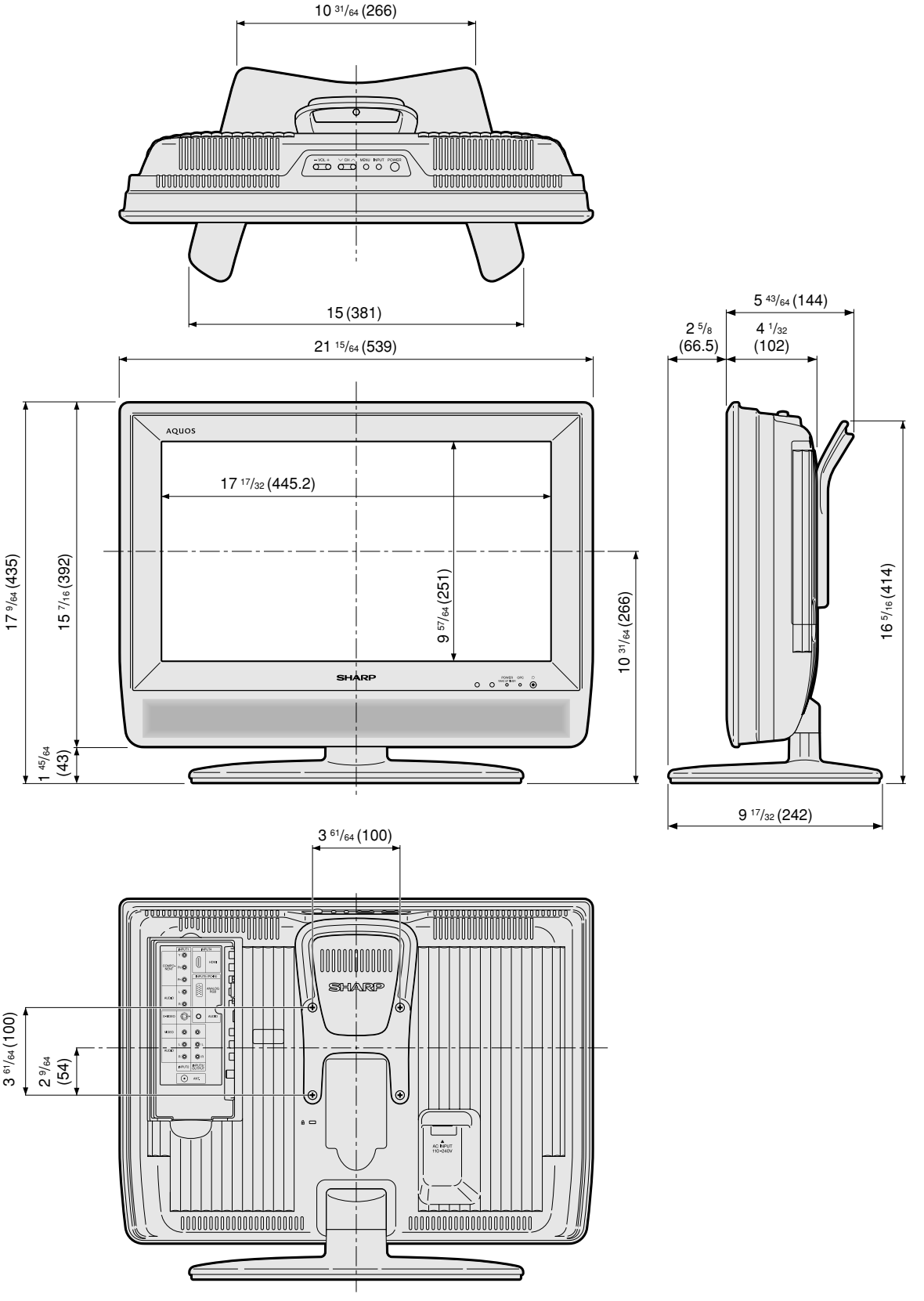
■ Do not install or place the remote control in direct sunlight. The heat may cause deformation of the unit.

■ The remote control may not work properly if the remote sensor window is in direct sunlight or strong lighting. In such a case, change the angle of the lighting or main unit, or operate the remote control closer to the remote sensor window.



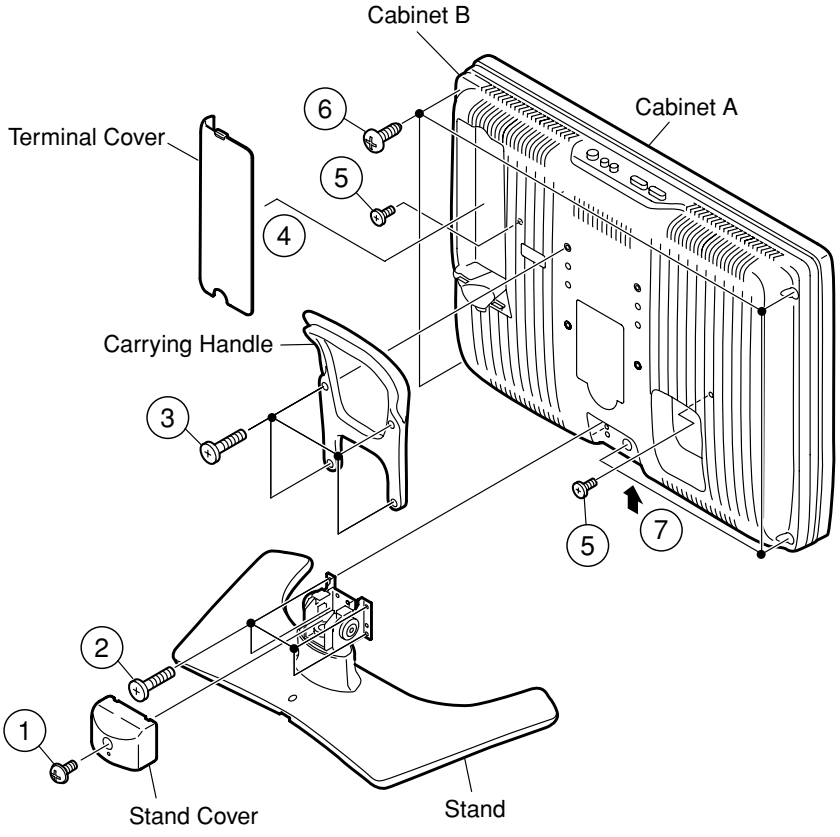
DIMENSIONS

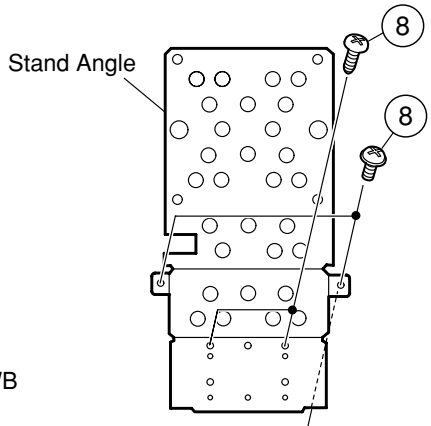
Unit: inch (mm)

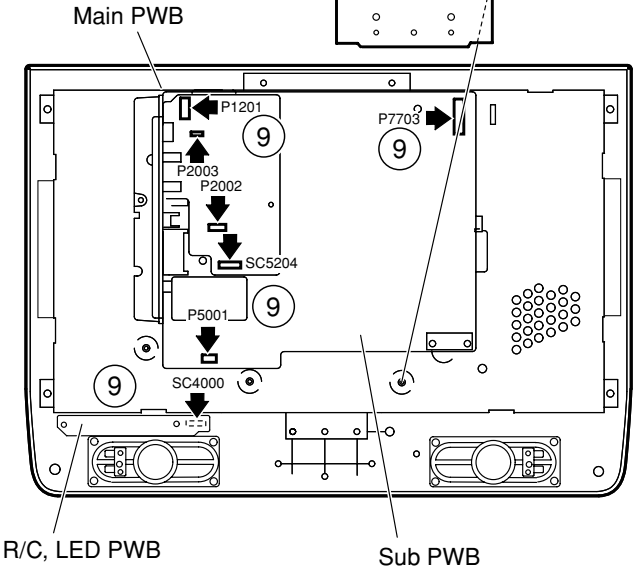


REMOVING OF MAJOR PARTS

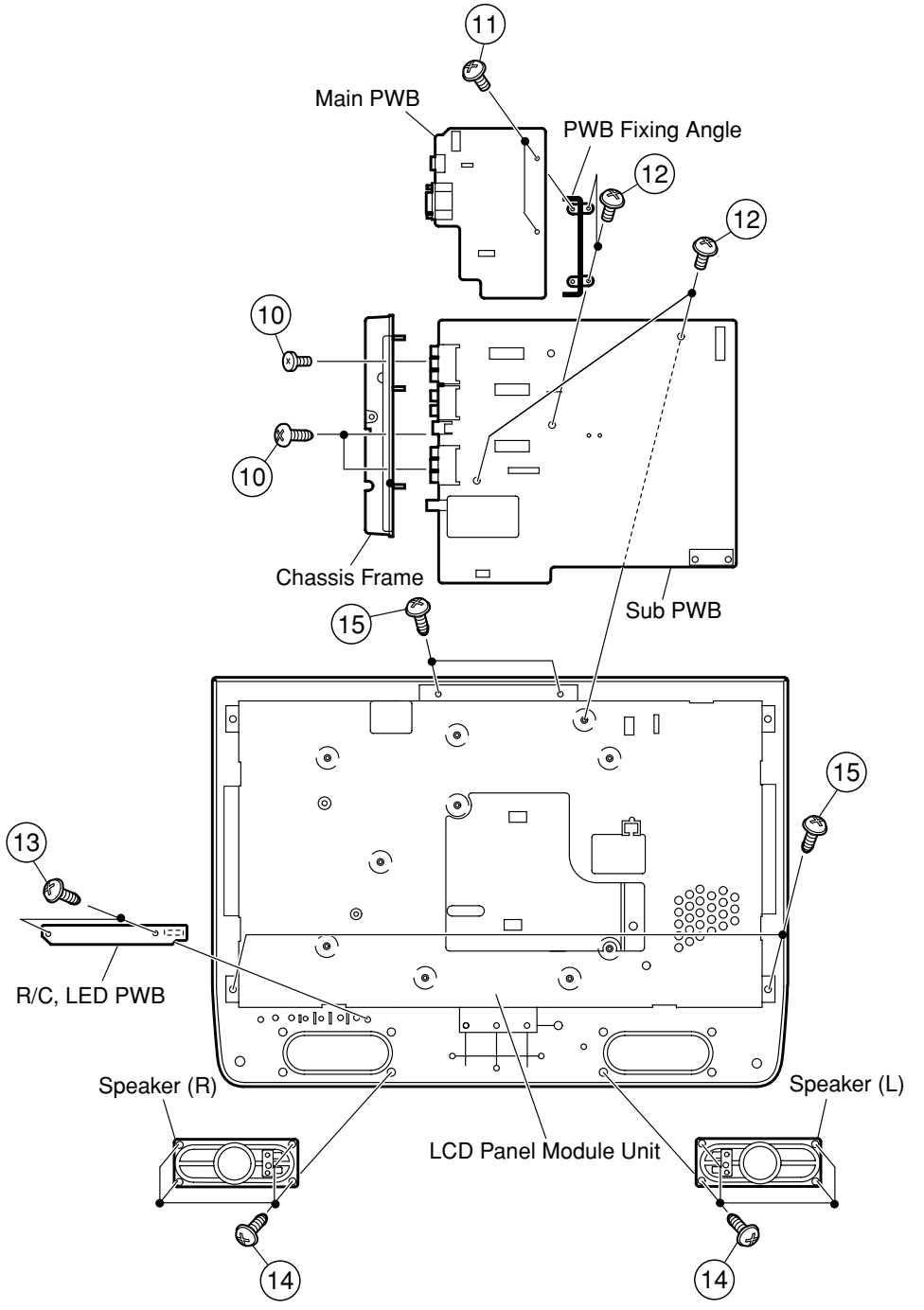
1. Remove the stand cover fixing screw (1 pc.).
2. Remove the stand fixing screws (4 pcs.).
3. Remove the carrying handle fixing screws (4 pcs.).
4. Remove the terminal cover.
5. Remove the terminal screws (2 pcs.).
6. Remove the cabinet B fixing screws (5 pcs.).
7. Remove the cabinet B after opening from the direction of an arrow.
8. Remove the stand angle fixing screws (4 pcs.).
9. Disconnect all the connectors from all the PWBs.





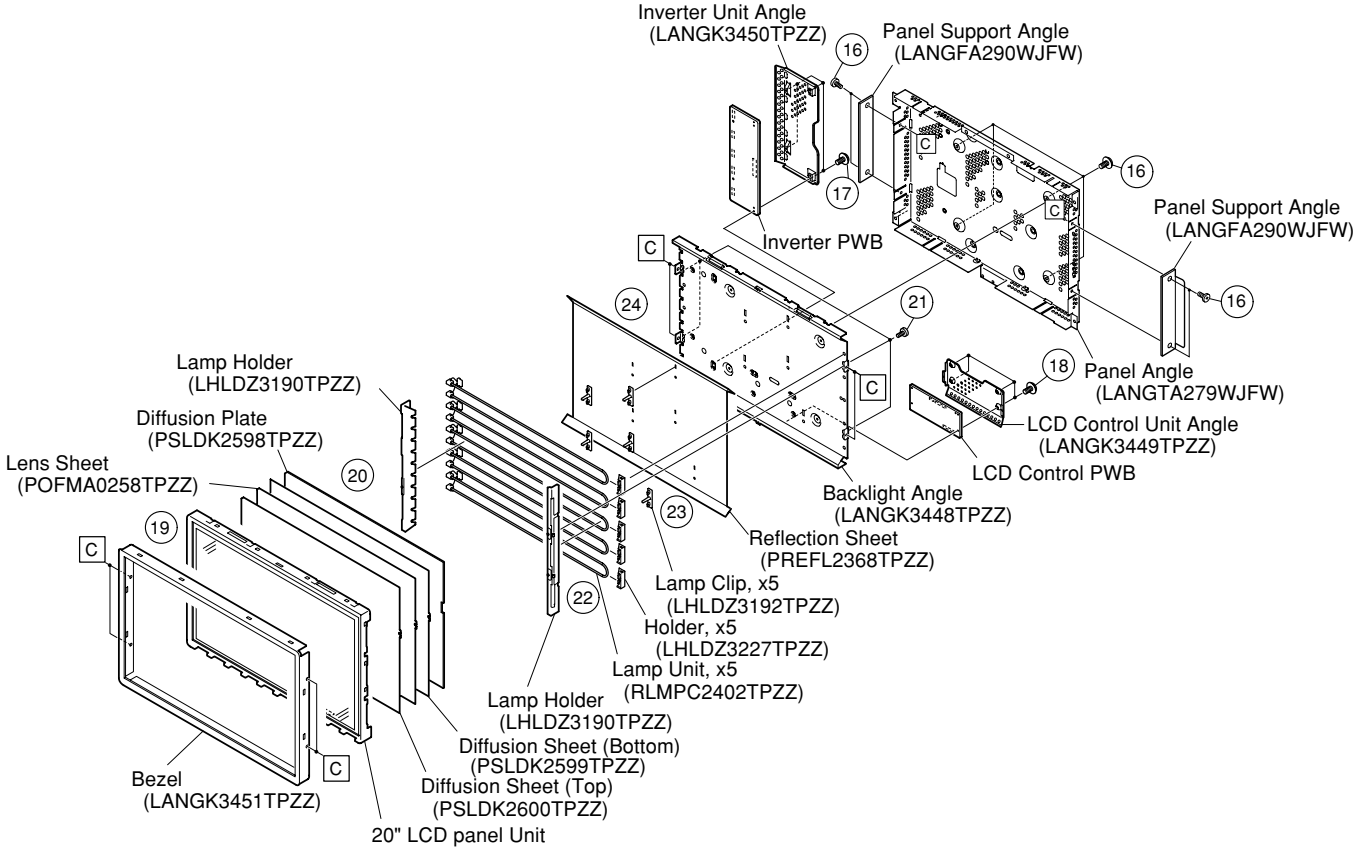


10. Remove the chassis frame fixing screws (3 pcs.).
11. Remove the 2 lock screws from the main PWB. Detach the chassis frame, together with its terminals, from the main PWB.
12. Remove the 4 lock screws from the sub PWB and the PWB fixing angle. Detach the chassis frame together with its terminals, from the sub PWB.
13. Remove the R/C, LED PWB fixing screws (2 pcs.).
14. Remove the 4 lock screws each from the right and left speakers and take out both the speakers.
15. Remove the LCD panel module unit fixing screw (4 pcs.).



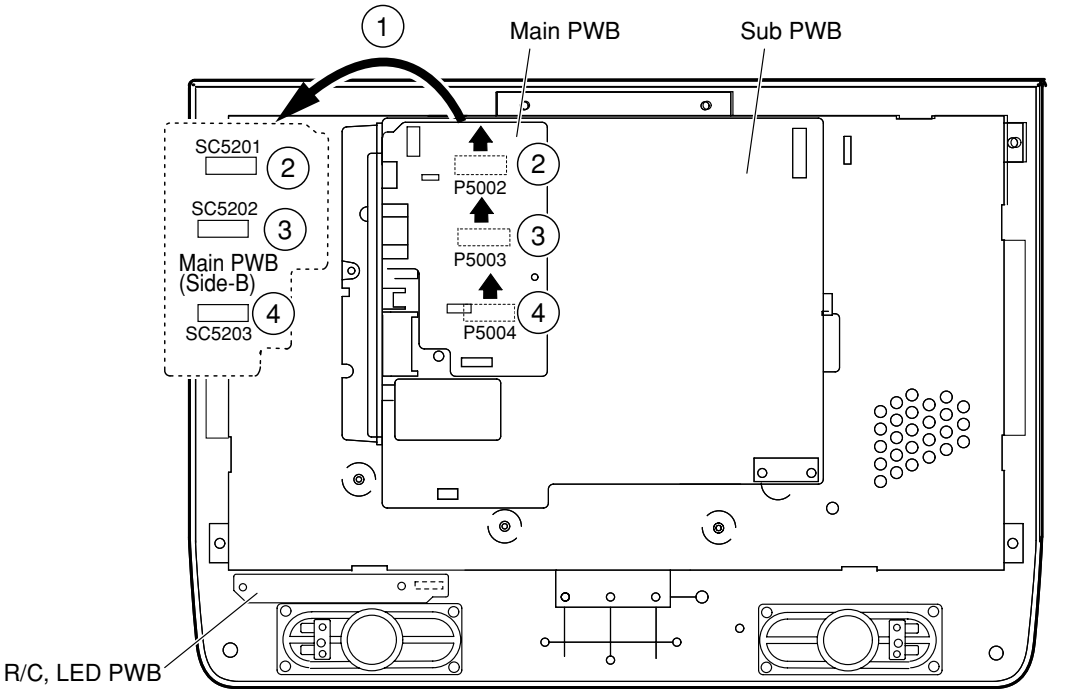
- Precautions in handling the LCD panel
  1. Handle it in a clean room. (above 50% humidity)
  2. The worker must wear an earth band.
  3. Be careful not to drop, vibrate and shock the panel.
  4. Use an ionizer. (within 30 cm)

16. Remove the 8 lock screws from the panel angle and the panel support angle. And then take out them.
17. Remove the 4 lock screws from the inverter unit angle then detach the inverter unit angle and the inverter PWB.
18. Remove the 4 lock screws then detach the LCD control unit angle and the LCD control PWB.
19. Remove the bezel and the LCD panel unit.
    <Note> Do not remove the LCD panel from the panel chassis. Be careful not to touch the LCD panel glass faces, driver IC, PWB with bare hands (Otherwise defects maybe caused in the production line.)
20. Remove the diffusion sheet (Top), lens sheet, diffusion (Bottom), diffusion plate.
    <Note> Fit the diffusion plate and sheets tightly in the backlight casing.
    If set out of position, the panel may set cracked.
21. Remove the lamp holder screws (4 pcs).
22. Remove the lamp holder, from the lamp unit.
23. Remove the lamp clip from the reflection sheet and the backlight angle.
24. Remove the reflection sheet from the backlight angle.



●Precautions in servicing the side-B (backside) of the main PWB unit

1. Remove the lock screws (3 pcs.) from the main PWB, detach the PWB from the chassis frame, and then turn it over.
2. Connect the service-specific extension FFC (flat cable) (QCNW-D721WJQZ) between the main PWB (SC5201) and the sub PWB (P5002).
3. Connect the service-specific extension FFC (flat cable) (QCNW-D721WJQZ) between the main PWB (SC5202) and the sub PWB (P5003).
4. Connect the service-specific extension FFC (flat cable) (QCNW-D721WJQZ) between the main PWB (SC5203) and the sub PWB (P5004).



Step	Part No.	Description
2	QCNW-D721WJQZ	Extension Cable 26-pin Main (SC5201)-Sub (P5002)
3	QCNW-D721WJQZ	Extension Cable 26-pin Main (SC5202)-Sub (P5003)
4	QCNW-D721WJQZ	Extension Cable 26-pin Main (SC5203)-Sub (P5004)

ADJUSTMENT PROCEDURE OF EACH SECTION

1. Preparations

(1) Plug the power cable in an AC power outlet.
AC 110 V~240V

[1] Adjustment procedure
1-1. Adjusting the checker
Power on (initialization) → Model number/inch size settings → Model-specified data transfer to E2PROM (I2C) → EDID data write
1-2. Finish process adjustment
Assembling → Power on → Adjustment process mode (bus connector) → AD converter level, TAMP, and white balance (cut-off and gain) adjustments
[2] Entering the checker mode and adjustment process mode
2-1. Entering the checker mode
* Set KEY-5 (pin 82 on the microprocessor) to "L" and turn on the power.

KEY-4	KEY-5	Mode shift
H	H	Normal mode (Brand-new data to be written and stored on E2PROM).
L	H	Shift to the adjustment process mode.
H	L	Checker process activated at the applied master ROM value (E2PROM still intact after checking).
L	L	E2PROM initialized and microprocessor's master values written on it (process adjustment values not rewritten).

2-2. Entering the adjustment process mode
There are the following three ways to enter this mode.
* Turn on the power and press the "ADJUST PROCESS" key on the remote controller.
* Set KEY-4 (pin (81) on the microprocessor) to "L" and turn on the power.
* In servicing:①Hold down the INPUT SELECT and VOL (–) keys at once, and turn on the power switch. ("K" appears at the top left of the screen to indicate the inspection process mode.) → ②Next hold down the CH (∨) and VOL (–) keys at once. (The adjustment process mode screen shows up.) To clear this mode, just turn off the power. (Either the power switch on the set or the remote controller may be used for this purpose.)

[3] Key operation in the adjustment process mode
■Basic operation
* Use the CH (∧)/(∨) keys to select a channel.
* Use the INPUT SELECT key to select an input.
* Use the CURSOR UP/DOWN key to select an item to be adjusted. (When the CURSOR DOWN key is pressed at the bottom item, it comes to the top item on the next page.
When the CURSOR UP key is pressed at the top item, it comes to the bottom item on the previous page.)
* Use the VOL (+)/(–) keys or CURSOR LEFT/RIGHT keys to modify the setting of a selected item.
* Press the MENU key to go to the next item. (When pressed at the bottom item, the top item on the next page is selected.)
* Press the MANUAL MEMORY key to go back to the top item. (When pressed at the top item, the top item on the previous page is selected.)
* Press the AUTO PRESET Key to go to the top item on the next page.

■Hierarchical level shift
* When the ENTER key is pressed at any item other than I2C DATA on page 9, the setting page of the item shows up.
* To get out of the setting page, press the PREVIOUS SCREEN key.

[4] Initialization
4-1. Get pins (81) and (82) of IC2001 (microprocessor) grounded, and turn on the power.
4-2. Check the MODEL setting (A633). * The MODEL setting can't be modified.
4-3. Check the INCH SIZE setting (20). * The INCH SIZE setting can't be modified.

(Adjustment process menu: Page 1 screen)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
0		1																									
1		▶	M	O	D	E	L																A	6	3	3	
2			I	N	C	H		S	I	Z	E														2	0	
3			E	R	R	O	R		N	O		R	E	S	E	T										0	
4			P	U	B	L	I	C		M	O	D	E											O	F	F	
5			V	-	C	H	I	P																		1	
6			E	X	T		C	O	N	T	R	O	L											O	F	F	
7																											
8																											

[5] Model-specified data transmitted (Data written on microprocessor E2PROM)
5-1. Model-specified data transmitted
None

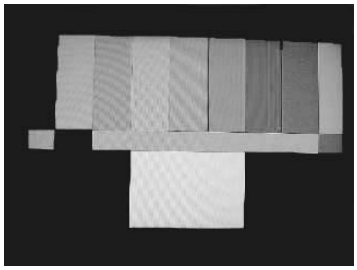
5-2. ROM CORRECTION
None

[6] Writing the EDID data
With the set's power off, write the updated-version data from the checker land to the E2PROMs for PC input (analog: IC401) and HDMI input (digital: IC403).
Write the data before making the HDMI inspection. (Otherwise the adjustment can't be made.)
For the 2006 production write data, refer to the accompanying document. (You are requested to modify the production year and check sum according to the production year.)

[7] Adjustment

7-1. AD converter level adjustment

① D3 input



1) Feeding the D3 75% color bar signal
   Instrument used: LEADER LT446 or LEADER LT448
   (1) LEADER LT446
      Signal name: COLOR BAR 75%
      Setting: 01: 1920 x 1080 / 60i
         H: 33.72 kHz, V: 29.97 Hz
   (2) LEADER LT448
      Signal name: COLOR BAR
      * Use the LT446-compatible third type out of the 3 color bar patterns.
      Setting: 02: 1080i / 59.94 (30sF)
         H: 33.72 kHz, V: 29.97 Hz

2) Turn on the AUTO GAIN-OFFSET1 item on Adjustment Process Page 7.

② PC input

1) Feeding the XGA white 100% signal
   Instrument used: LEADER LT448
   Signal name: RASTER 100%
   Setting: 28: XGA (1024 x 768)
      H: 48.36 kHz, V: 60.00 Hz
2) Turn on the AUTO GAIN2 item on Adjustment Process Page 8.

7-2. TAMP adjustment

1) Receive the standard color bar signal.
2) Suppose that the "YDATA" reading on Adjustment Process Page 2 is not as specified in the table below. Adjust the "NTSC TAMP" setting on the same page to have the "YDATA" reading as specified below.
   * Note that the setting may be different from model to model.
3) Make sure that the "PAL-M TAMP" and "PAL-N TAMP" settings are 6 higher than the "NTSC TAMP" setting.

Model	LC-20D30U
Setting	155-158

Reference
(Adjustment process menu: Page 2 screen)

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
0	2																										
1		▶	T	A	M	P		L														1	5	5			
2			Y	D	A	T	A															1	5	7			
3			T	A	M	P		H														1	5	8			
4			N	T	S	C		T	A	M	P												8	5			
5			P	A	L	-	M		T	A	M	P											9	1			
6			P	A	L	-	N		T	A	M	P											9	1			
7																											
8																											

Y Data
(White 75%)

7-3. White balance adjustment

1) Adjustment procedure (Call the AV input mode with INPUT2 or INPUT3.)
Adjust the white 40% setting at RGB CUTOFF2 first and then the white 80% setting at RGB-GAIN. (Set the RGB GAMMA level at 0.9.)
(1) Test signal adjustment
[Input signal] Make the DVP-incorporated white balance test signal (white 80% on the left onscreen: 191-level gradation, white 40% on the right onscreen: 92-level gradation) appear on the screen.
[Specifications] Adjustment Process Page 3: RGB CUTOFF2, RGB-GAIN

		Adjustment spec.	Inspection spec.	
White 80%	x=0.268	±0.004	±0.01	Radius from center point
	y=0.279	±0.004	±0.01	Radius from center point
White 40%	x=0.266	±0.002	±0.01	Radius from center point
	y=0.279	±0.002	±0.01	Radius from center point

[Adjustment procedure with the bus]
Cut-off (RGB CUTOFF2) Fix the G CUTOFF2 setting at 0. Adjustment range ±50
Vary the R/B CUTOFF2 settings accordingly.
Gain (RGB-GAIN) Fix the G-GAIN setting at 0. Adjustment range ±80
Vary the R/B-GAIN settings accordingly.
(For the adjustment, use Minolta CA-210 at Engineering Department, and for the calibration, use CH02"TOPCON" mode. Make measurements in the interchangeable mode with Production Department and Production Engineering Department.)

7-4. Common bias adjustment

1) Generate the built-in signal.
2) Adjust the VR1 on the LCD control PWB until flickering gets minimum.
* Make this adjustment only when the LCD control PWB (CPWBX3335TPZZ) has been replaced.

[8] Factory settings

1) Hold down the "INPUT" and "VOL (–)" buttons of the set at once and turn on the power. Then keep pressing the "CH (∧)" and "VOL (+)" buttons. (The "SETTING COMPLETE" message appears onscreen.)
2) Make sure that "SETTING COMPLETE" appears at the center of the screen a couple of seconds later.

3) Turn off the power.
* Note: Immediately after making the factory settings, turn off the power switch. (At the next power-on, the set gets started in the EZ SETUP mode. If any extra key-in is made after the factory settings are complete, the set may run properly.)

8-2. Initial value of factory settings

						Settings & ranges	Factory settings (TV)	(INPUT1)	(INPUT2)	(INPUT3)	(INPUT4)		
MENU	PICTURE	AV MODE				STANDARD/DYNAMIC/DYNAMIC(FIXED)/MOVIE/GAME	DYNAMIC	DYNAMIC	DYNAMIC	DYNAMIC	DYNAMIC		
							(except for PC)	(PC)					
		OPC				ON/OFF	OFF	OFF					
		BACKLIGHT				BRIGHT/NORMAL/DARK/VARIABLE	VARIABLE	VARIABLE					
							(STANDARD)	(DYNAMIC)	(DYNAMIC(FIXED)	(MOVIE)	(GAME)	(PC)	
						1 (DARK)~9 (NORMAL) ~ 17(BRIGHT)	17	17	17	7	9	17 (BRIGHT)	
		CONTRAST				0 ~ 60	30	40	40	30	30	–	
		BRIGHTNESS				-30 ~ +30	0	0	0	0	0	–	
		COLOR				-30 ~ +30	0	+5	+5	0	0	–	
		TINT				-30 ~ +30	0	0	0	0	0	–	
		SHARPNESS				-10 ~ +10	0	0	0	0	0	–	
							(except for PC)	(PC)					
		ADVANCED	COLOR TEMP.			USER/HIGH/MIDDLE/LOW	MIDDLE	MIDDLE					
			RED			-30 ~ +30	0	0					
			GREEN			-30 ~ +30	0	0					
			BLUE			-30 ~ +30	0	0					
			I/P SETTING			INTERLACE/PROGRESSIVE	PROGRESSIVE						
			NOISE CLEAN			ON/OFF	OFF						
			FILM MODE			ON/OFF	OFF						
			QUICK SHOOT			ON/OFF	ON						
			RESET			YES/NO	NO	Keep "NO" selected to go to the setting screen.					
		RESET				YES/NO	NO	Keep "NO" selected to go to the setting screen.					
	AUDIO	TREBLE				-10 ~ +10	0						
		BASS				-10 ~ +10	0						
		BALANCE				-10 (L)~ +10 (R)	0						
		RESET				YES/NO	NO	Keep "NO" selected to go to the setting screen.					
	SETUP	CH-SETUP	EZ-SETUP			YES/NO	YES						
				LANGUAGE		ENGLISH/ESPANOL/FRANCAIS	ENGLISH						
				CH SETTING		ON/OFF	ON						
				AUTO CLOCK		ON/OFF	ON						
				START		YES/NO	YES						
			AIR/CABLE			AIR/CABLE	AIR						
			CH SEARCH			–	–						
			CH MEMORY			–	–						
		MTS				STEREO/SAP/MONO	STEREO						
		CLOCK	SET			AUTO/MANUAL	AUTO						
				AUTO		AUTO/[2] ~ [69] or [1] ~ [125]	AUTO						
				MANUAL	DST	ON/OFF	OFF						
					TIME	12:00AM ~ 11:59PM	12:00AM	Have the clock setting not yet fixed, and keep the display as shown at left to go to the MANUAL CLOCK setting screen.					
			TIME DISPLAY			ON/OFF	ON						
		INPUT3 IN/OUT				IN/OUT○/OUT×	IN						
		V-CHIP BLOCK	SECRET No.			4-DIGIT INPUT	CLEAR						
			MPAA	G		(NONE)/BLOCK	NONE						
				PG		(NONE)/BLOCK	NONE						
				PG-13		(NONE)/BLOCK	NONE						
				R		(NONE)/BLOCK	NONE						
				NC-17		(NONE)/BLOCK	NONE						
				X		(NONE)/BLOCK	NONE						
			TV GUIDELINES	TV-Y		(NONE)/BLOCK	NONE						
				TV-Y7		(NONE)/BLOCK	NONE						
				TV-G		(NONE)/BLOCK	NONE						
				TV-PG		(NONE)/BLOCK	NONE						
				TV-14		(NONE)/BLOCK	NONE						
				TV-MA		(NONE)/BLOCK	NONE						
				BLOCK CONTENT	D	(BLANK)/BLOCK	BLANK	(UN BLOCK)					
					L	(BLANK)/BLOCK	BLANK	(UN BLOCK)					
					S	(BLANK)/BLOCK	BLANK	(UN BLOCK)					
					V	(BLANK)/BLOCK	BLANK	(UN BLOCK)					
					FV	(BLANK)/BLOCK	BLANK	(UN BLOCK)					
			CAN.ENGLISH RATINGS	C		(NONE)/BLOCK	NONE						
				C8+		(NONE)/BLOCK	NONE						
				G		(NONE)/BLOCK	NONE						
				PG		(NONE)/BLOCK	NONE						
				14+		(NONE)/BLOCK	NONE						
				18+		(NONE)/BLOCK	NONE						
			CAN.FRENCH RATINGS	G		(NONE)/BLOCK	NONE						
				8 ans+		(NONE)/BLOCK	NONE						
				13 ans+		(NONE)/BLOCK	NONE						
				16 ans+		(NONE)/BLOCK	NONE						
				18 ans+		(NONE)/BLOCK	NONE						
			STATUS			ON/OFF	OFF						
		CLOSED CAPTION				OFF/CC1/CC2/T1/T2	OFF						
							(TV)	(INPUT2)	(INPUT3)				
		COLOR SYSTEM				AUTO/N358/N443/PAL/PAL-M/PAL-N/SECAM/PAL60 (* N358/PAL-M/PAL-N only in the TV mode)	N358	AUTO	AUTO			
		HDMI SETUP	SIGNAL TYPE			AUTO/RGB/YCbCr	AUTO						
			COLOR MATRIX			AUTO/ITU601/ITU709	AUTO						
			DYNAMIC RANGE			STANDARD/OUT OF STANDARD	STANDARD						
			AUTO VIEW			ENABLE/DISABLE	ENABLE						
		PC SETTING	INPUT SIGNAL			1280×768 (60Hz) / 1024×768 (60Hz) / 800×600 (60Hz) / 640×480(60Hz)	1024x768 (60Hz)						
			FINE SYNC.	H-POS.		-90 ~ +90	0						
				V-POS.		-15 ~ +15	0						
				CLOCK		-90 ~ +90	0						
				PHASE		-15 ~ +16	0						
				RESET		YES/NO	NO	Keep "NO" selected to go to the setting screen.					
		LANGUAGE				ENGLISH/ESPANOL/FRANCAIS	ENGLISH						
	OPTION	VIEW MODE			Not with PC	SIDE BAR/S. STRETCH/ZOOM/STRETCH	(TV) S. STRETCH	(INPUT1) (At SD) S.STRETCH (At HD)STRETCH	(INPUT2) S. STRETCH	(INPUT3) S. STRETCH	(INPUT4) (At SD) S.STRETCH (At HD)STRETCH	(INPUT5) NORMAL	
					With PC	NORMAL/STRETCH							
		AUDIO ONLY				ON/OFF	OFF						
		BLUE SCREEN				ON/OFF	OFF						
		SLEEP TIMER				OFF/30/60/90/120/150MIN	OFF(CLEAR)	Keep "OFF" selected to go to the setting screen.					
		WAKE UP TIMER	TIMER			ON/OFF	OFF						
			TIME			12:00AM ~ 11:59PM	12:00AM						
			CHANNEL			CH1 ~ 125/INPUT1 ~ INPUT4	CH2						
			VOL.			0 ~ 60	20						
		NO SIGNAL OFF				ENABLE/DISABLE	DISABLE						
		NO OPERATION OFF				ENABLE/DISABLE	DISABLE						
		POWER MANAGEMENT				ON/OFF	OFF						
		PICTURE FLIP				NORMAL/MIRROR/ROTATE/UPSIDE DOWN	NORMAL						

(Items not on the menu)	Factory settings
EZ SETUP AUTOMATIC STARTUP	ON
LAST CHANNEL	2ch
LAST TV/INPUT	TV
FLASH BACK	2ch
SKIP DATA_CATV	ALL SKIP
SKIP DATA_AIR	ALL SKIP
VOLUME	20
LINE OUT LEVEL (AT VAO)	0
EDS CH (FOR AUTO)	NOT YET FIXED

HOTEL MODE	POWER ON FIXED	VARIABLE
	MAXIMUM VOLUME	60
	VOLUME FIXED	VARIABLE
	REMOTE CONTROL	RESPOND
	USER CONTROL	RESPOND
	MENU BUTTON	RESPOND
	ON SCREEN DISPLAY	YES
	START MODE	NORMAL
	INPUT MODE FIXED	VARIABLE

LIST OF THE ADJUSTMENT PROCESS MODE MENU

For calling the adjustment process mode and keying in this mode, refer back to "ADJUSTING PROCEDURE OF EACH SECTION".

DEFAULT CHART OF ADJUSTMENT PROCESS 1ST HIERARCHICAL ITEMS

Page No.	Item	Initial Value	Function	Servicing notes & precautions
BASIC SETTINGS				
1	MODEL	A633	MODEL NUMBER (NOT TO CHANGE)	UNMODIFIABLE.
	INCH SIZE	20	INCH SIZE SELECTION (NOT TO CHANGE)	USED AT INITIALIZATION. NOT TO MODIFY IN OTHER CASES. IF MODIFIED, DATA TO BE WRITTEN AGAIN AND READJUSTMENT TO BE MADE.
	ERROR NO RESET	0	LAMP ERROR COUNT AND RESET	NOT USED
	PUBLIC MODE	OFF	HOTEL MODE SETTING	NOT USED
	V-CHIP	1	V-CHIP LINE MUTE SETTING	NOT USED
	EXT CONTROL	OFF	BUS, UART OPEN	NOT USED
	THE ROM AND GAIBU VERSION NUMBERS ARE DISPLAYED AT THE BOTTOM.			
VIDEO ADJUSTMENT				
2	TAMP L	155	Y LOWER-LIMIT SETTING AT TAMP ADJUSTMENT	NOT USED
	YDATA	—	DATA READ VALUE AT TAMP ADJUSTMENT	SEE ADJUSTMENT PROCEDURE.
	TAMP H	158	Y UPPER-LIMIT SETTING AT TAMP ADJUSTMENT	NOT USED
	NTSC TAMP	90	TAMP ADJUSTMENT	SEE ADJUSTMENT PROCEDURE.
	PAL-M TAMP	96	TAMP ADJUSTMENT	SEE ADJUSTMENT PROCEDURE.
	PAL-N TAMP	96	TAMP ADJUSTMENT	SEE ADJUSTMENT PROCEDURE.
WHITE BALANCE ADJUSTMENT				
3	RCUTOFF2	0	RED CUT-OFF ADJUSTMENT2	SEE ADJUSTMENT PROCEDURE.
	GCUTOFF2	0	GREEN CUT-OFF ADJUSTMENT2	SEE ADJUSTMENT PROCEDURE.
	BCUTOFF2	0	BLUE CUT-OFF ADJUSTMENT2	SEE ADJUSTMENT PROCEDURE.
	RGAIN	0	WHITE BALANCE ADJUSTMENT2	SEE ADJUSTMENT PROCEDURE.
	GGAIN	0	WHITE BALANCE ADJUSTMENT2	SEE ADJUSTMENT PROCEDURE.
	BGAIN	0	WHITE BALANCE ADJUSTMENT2	SEE ADJUSTMENT PROCEDURE.
	RGB GAMMA	0.9	RGB γ COEFFICIENT SETTING	NOT USED
COMPONENT AD ADJUSTMENT				
7	AUTO GAIN-OFFSET1	OFF	AUTOMATIC ADJUSTMENT OFF/RUN OF AD9883 GAIN AND OFFSET	SEE ADJUSTMENT PROCEDURE.
	AD R GAIN	185	1125I/750P INPUT RED GAIN ADJUSTMENT	SEE ADJUSTMENT PROCEDURE.
	AD G GAIN	185	1125I/750P INPUT GREEN GAIN ADJUSTMENT	SEE ADJUSTMENT PROCEDURE.
	AD B GAIN	185	1125I/750P INPUT BLUE GAIN ADJUSTMENT	SEE ADJUSTMENT PROCEDURE.
	AD R OFFSET	126	1125I/750P INPUT RED OFFSET ADJUSTMENT	NOT USED
	AD G OFFSET	94	1125I/750P INPUT GREEN OFFSET ADJUSTMENT	NOT USED
	AD B OFFSET	126	1125I/750P INPUT BLUE OFFSET ADJUSTMENT	NOT USED
	RGTAR	A4	1125I/750P INPUT RED GAIN ADJUSTMENT TARGET	NOT USED
	GGTAR	A4	1125I/750P INPUT GREEN GAIN ADJUSTMENT TARGET	NOT USED
	BGTAR	A4	1125I/750P INPUT BLUE GAIN ADJUSTMENT TARGET	NOT USED
	RGCAL	—	DISPLAY OF Y LEVEL/CHROMA CALCULATED VALUES	NOT USED
	GGCAL	—	DISPLAY OF Y LEVEL/CHROMA CALCULATED VALUES	NOT USED
	BGCAL	—	DISPLAY OF Y LEVEL/CHROMA CALCULATED VALUES	NOT USED
	ROCAL	—	DISPLAY OF Y LEVEL/WHITE LEVEL CALCULATED VALUES IN CLAMP FIELD	NOT USED
	GOCAL	—	DISPLAY OF Y LEVEL/WHITE LEVEL CALCULATED VALUES IN CLAMP FIELD	NOT USED
	BOCAL	—	DISPLAY OF Y LEVEL/WHITE LEVEL CALCULATED VALUES IN CLAMP FIELD	NOT USED

Page No.	Item	Initial Value	Function	Servicing notes & precautions

PCAD ADJUSTMENT

8	AUTO GAIN2	OFF	AUTOMATIC ADJUSTMENT OFF/RUN OF AD9883 GAIN	SEE ADJUSTMENT PROCEDURE.
	AUTO OFFSET2	OFF	AUTOMATIC ADJUSTMENT OFF/RUN OF AD9883 OFFSET	NOT USED
	PCAD R GAIN	180	PC INPUT RED GAIN ADJUSTMENT	SEE ADJUSTMENT PROCEDURE.
	PCAD G GAIN	180	PC INPUT GREEN GAIN ADJUSTMENT	SEE ADJUSTMENT PROCEDURE.
	PCAD B GAIN	180	PC INPUT BLUE GAIN ADJUSTMENT	SEE ADJUSTMENT PROCEDURE.
	PCAD R OFFSET	128	PC INPUT RED OFFSET ADJUSTMENT	NOT USED
	PCAD G OFFSET	128	PC INPUT GREEN OFFSET ADJUSTMENT	NOT USED
	PCAD B OFFSET	128	PC INPUT BLUE OFFSET ADJUSTMENT	NOT USED
	RGTAR	E6	PC INPUT RED GAIN ADJUSTMENT TARGET	NOT USED
	GGTAR	E6	PC INPUT GREEN GAIN ADJUSTMENT TARGET	NOT USED
	BGTAR	E6	PC INPUT BLUE GAIN ADJUSTMENT TARGET	NOT USED
	RGCAL	—	DISPLAY OF Y LEVEL/CHROMA CALCULATED VALUES	NOT USED
	GGCAL	—	DISPLAY OF Y LEVEL/CHROMA CALCULATED VALUES	NOT USED
	BGCAL	—	DISPLAY OF Y LEVEL/CHROMA CALCULATED VALUES	NOT USED
	ROCAL	—	DISPLAY OF Y LEVEL/WHITE LEVEL CALCULATED VALUES IN CLAMP FIELD	NOT USED
	GOCAL	—	DISPLAY OF Y LEVEL/WHITE LEVEL CALCULATED VALUES IN CLAMP FIELD	NOT USED
	BOCAL	—	DISPLAY OF Y LEVEL/WHITE LEVEL CALCULATED VALUES IN CLAMP FIELD	NOT USED

LIST OF VARIOUS SETTINGS

9	I2C DATA	0	I2C (BUS CONTROL IC) DATA WRITE AND READ	NOT USED
	I2C DATA	WAIT	WRITE AND READ EXECUTION	NOT USED
	SOUND	—	SHIFT TO SOUND ADJUSTMENT PAGE	PRESS ENTER KEY TO GO TO SOUND ADJUSTMENT PAGE.
	DVP	—	SHIFT TO DVP ADJUSTMENT PAGE	PRESS ENTER KEY TO GO TO DVP ADJUSTMENT PAGE.
	TUNER	—	SHIFT TO TUNER ADJUSTMENT PAGE	PRESS ENTER KEY TO GO TO TUNER ADJUSTMENT PAGE.
	OTHERS	—	SHIFT TO OTHERS ADJUSTMENT PAGE	PRESS ENTER KEY TO GO TO OTHERS ADJUSTMENT PAGE.

AUDIO ADJUSTMENT PROCESS DEFAULTS CHART

Page No.	Item	Initial Value	Function	Servicing notes & precautions

AUDIO ADJUSTMENT

SOUND1	VOLUME	20	SOUND VOLUME	NOT USED
	MSP DATA	0	AUDIO IC MSP DATA WRITE AND READ	NOT USED
	MSP DATA	WAIT	WRITE AND READ EXECUTION	NOT USED
	CARRIER MUTE	ON	AUDIO OUTPUT SETTING WITH TV OUT OF SYNC	NOT USED
	IGR THR	12D	IGR THRESHLEVEL	NOT USED

AUDIO ADJUSTMENT

SOUND2	PRESCALE SCART	27	PRE-SCALE SETTING (EXTERNAL INPUT, MOBILE: LINE OUTPUT)	NOT USED
	PRESCALE FM/AM-M	31	PRE-SCALE SETTING (TV)	NOT USED
	PRESCALE I2S1	16	PRE-SCALE SETTING (SOUND THROUGH PARAMETRIC EQUALIZER)	NOT USED
	HPF VDS OFF	OFF	HIGH-PASS FILTER SETTING WITH DOLBY VIRTUAL OFF	NOT USED

AUDIO ADJUSTMENT (EQUALIZER)

SOUND3	BAND1 MIN	TV	-0325	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	-0325	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED
	BAND1 CNT	TV	+0425	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	+0425	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED
	BABD1 MAX	TV	+1175	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	+1175	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED
	BAND2 MIN	TV	-0350	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	-0350	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED
	BAND2 CNT	TV	-0050	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	-0050	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED
	BABD2 MAX	TV	+0250	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	+0250	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED
	BAND3	TV	-0450	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	-0450	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED

Page No.	Item	Initial Value	Function	Servicing notes & precautions

AUDIO ADJUSTMENT (EQUALIZER)

SOUND4	BAND4 MIN	TV	-0375	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	-0375	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED
	BAND4 CNT	TV	-0075	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	-0075	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED
	BAND4 MAX	TV	+0225	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	+0225	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED
	BAND5 MIN	TV	-0725	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	-0725	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED
	BAND5 CNT	TV	+0075	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	+0075	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED
	BAND5 MAX	TV	+0875	EQUALIZER SETTING (WITH ANALOG TV INPUT)	NOT USED
		OTHER	+0875	EQUALIZER SETTING (WITH OTHER INPUTS THAN ANALOG TV)	NOT USED

DVP ADJUSTMENT PROCESS DEFAULTS CHART

Page No.	Item	Initial Value	Function	Servicing notes & precautions
DVP1	DVP DATA 0000 F0 ------(----)	—	GENERAL-PURPOSE VARIABLE ADJUSTMENT ITEM FOR DVP REVIEW	NOT USED
	DVP TEST PATTERN	0	TEST PATTERN SELECTION	SEE TEST PATTERNS IN ADJUSTMENT PROCESS MODE.
	VCDOFFSET	15	MINIMUM OSCILLATION CYCLE OF VERTICAL COUNT-DOWN	NOT USED
	VCDWINDOW	30	SYNC RANGE OF VERTICAL COUNT-DOWN	NOT USED
	READ TEMP±---.--°C	—	DISPLAY OF TEMPERATURE DATA READING	NOT USED
DVP3	N358 TV CONT	138	N358 CONTRAST SETTING (TV)	NOT USED
	N358 AV CONT	138	N358 CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV BRIGHT	128	N358 BRIGHTNESS SETTING (TV)	NOT USED
	N358 AV BRIGHT	128	N358 BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV COLOR	48	N358 COLOR DENSITY SETTING (TV)	NOT USED
	N358 AV COLOR	48	N358 COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV TINT	138	N358 TINT SETTING (TV)	NOT USED
	N358 AV TINT	138	N358 TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV SHARP V	100	N358 V SHARPNESS SETTING (TV)	NOT USED
	N358 AV SHARP V	100	N358 V SHARPNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	N358 TV SHARP H1	200	N358 H SHARPNESS SETTING 1 (TV)	NOT USED
	N358 AV SHARP H1	200	N358 H SHARPNESS SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	N358 TV SHARP H2	150	N358 H SHARPNESS SETTING 2 (TV)	NOT USED
	N358 AV SHARP H2	160	N358 H SHARPNESS SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP4	N443 AV CONT	137	N443 CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV BRIGHT	128	N443 BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV COLOR	48	N443 COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV TINT	138	N443 TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV SHARP V	100	N443 V SHARPNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	N443 AV SHARP H1	200	N443 H SHARPNESS SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	N443 AV SHARP H2	160	N443 H SHARPNESS SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP5	PAL AV CONT	137	PAL SHARPNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV BRIGHT	128	PAL CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV COLOR	48	PAL COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV TINT	138	PAL TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV SHARP V	100	PAL V SHARPNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL AV SHARP H1	200	PAL H SHARPNESS SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL AV SHARP H2	160	PAL H SHARPNESS SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP6	SECAM AV CONT	137	SECAM SHARPNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV BRIGHT	128	SECAM CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV COLOR	48	SECAM COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV TINT	138	SECAM TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV SHARP V	100	SECAM V SHARPNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV SHARP H1	200	SECAM H SHARPNESS SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	SECAM AV SHARP H2	160	SECAM H SHARPNESS SETTING 2 (COMPOSITE, S VIDEO)	NOT USED

Page No.	Item	Initial Value	Function	Servicing notes & precautions
DVP7	PAL60 AV CONT	137	PAL60 SHARPNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV BRIGHT	128	PAL60 CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV COLOR	48	PAL60 COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV TINT	138	PAL60 TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV SHARP V	100	PAL60 V SHARPNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV SHARP H1	200	PAL60 H SHARPNESS SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL60 AV SHARP H2	160	PAL60 H SHARPNESS SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP8	PAL-M TV CONT	137	PAL-M CONTRAST SETTING (TV)	NOT USED
	PAL-M AV CONT	137	PAL-M CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV BRIGHT	128	PAL-M BRIGHTNESS SETTING (TV)	NOT USED
	PAL-M AV BRIGHT	128	PAL-M BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV COLOR	48	PAL-M COLOR DENSITY SETTING (TV)	NOT USED
	PAL-M AV COLOR	48	PAL-M COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV TINT	138	PAL-M TINT SETTING (TV)	NOT USED
	PAL-M AV TINT	138	PAL-M TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV SHARP V	100	PAL-M V SHARPNESS SETTING (TV)	NOT USED
	PAL-M AV SHARP V	100	PAL-M V SHARPNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV SHARP H1	200	PAL-M H SHARPNESS SETTING 1 (TV)	NOT USED
	PAL-M AV SHARP H1	200	PAL-M H SHARPNESS SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL-M TV SHARP H2	150	PAL-M H SHARPNESS SETTING 2 (TV)	NOT USED
	PAL-M AV SHARP H2	160	PAL-M H SHARPNESS SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP9	PAL-N TV CONT	137	PAL-N CONTRAST SETTING (TV)	NOT USED
	PAL-N AV CONT	137	PAL-N CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV BRIGHT	128	PAL-N BRIGHTNESS SETTING (TV)	NOT USED
	PAL-N AV BRIGHT	128	PAL-N BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV COLOR	48	PAL-N COLOR DENSITY SETTING (TV)	NOT USED
	PAL-N AV COLOR	48	PAL-N COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV TINT	138	PAL-N TINT SETTING (TV)	NOT USED
	PAL-N AV TINT	138	PAL-N TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV SHARP V	100	PAL-N V SHARPNESS SETTING (TV)	NOT USED
	PAL-N AV SHARP V	100	PAL-N V SHARPNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV SHARP H1	200	PAL-N H SHARPNESS SETTING 1 (TV)	NOT USED
	PAL-N AV SHARP H1	200	PAL-N H SHARPNESS SETTING 1 (COMPOSITE, S VIDEO)	NOT USED
	PAL-N TV SHARP H2	150	PAL-N H SHARPNESS SETTING 2 (TV)	NOT USED
	PAL-N AV SHARP H2	160	PAL-N H SHARPNESS SETTING 2 (COMPOSITE, S VIDEO)	NOT USED
DVP10	525I CONT	138	525I CONTRAST SETTING (TV)	NOT USED
	525I BRIGHT	128	525I BRIGHTNESS SETTING (TV)	NOT USED
	525I COLOR	68	525I COLOR DENSITY SETTING (TV)	NOT USED
	525I TINT	130	525I TINT SETTING (TV)	NOT USED
	525I SHARP V	100	525I V SHARPNESS SETTING (TV)	NOT USED
	525I SHARP H1	160	525I H SHARPNESS SETTING 1 (TV)	NOT USED
	525I SHARP H2	160	525I H SHARPNESS SETTING 2 (TV)	NOT USED
	525P CONT	137	525P CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	525P BRIGHT	128	525P BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	525P COLOR	64	525P COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	525P TINT	140	525P TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	525P SHARP V	100	525P V SHARPNESS SETTING (TV)	NOT USED
	525P SHARP H1	120	525P H SHARPNESS SETTING 1 (TV)	NOT USED
	525P SHARP H2	120	525P H SHARPNESS SETTING 2 (TV)	NOT USED

Page No.	Item	Initial Value	Function	Servicing notes & precautions
DVP11	625I CONT	138	625I CONTRAST SETTING (TV)	NOT USED
	625I BRIGHT	128	625I BRIGHTNESS SETTING (TV)	NOT USED
	625I COLOR	68	625I COLOR DENSITY SETTING (TV)	NOT USED
	625I TINT	130	625I TINT SETTING (TV)	NOT USED
	625I SHARP V	100	625I V SHARPNESS SETTING (TV)	NOT USED
	625I SHARP H1	160	625I H SHARPNESS SETTING 1 (TV)	NOT USED
	625I SHARP H2	160	625I H SHARPNESS SETTING 2 (TV)	NOT USED
	625P CONT	137	625P CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	625P BRIGHT	128	625P BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	625P COLOR	64	625P COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	625P TINT	140	625P TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	625P SHARP V	100	625P V SHARPNESS SETTING (TV)	NOT USED
	625P SHARP H1	120	625P H SHARPNESS SETTING 1 (TV)	NOT USED
	625P SHARP H2	120	625P H SHARPNESS SETTING 2 (TV)	NOT USED
DVP12	1125I CONT	137	1125I CONTRAST SETTING (TV)	NOT USED
	1125I BRIGHT	128	1125I BRIGHTNESS SETTING (TV)	NOT USED
	1125I COLOR	64	1125I COLOR DENSITY SETTING (TV)	NOT USED
	1125I TINT	140	1125I TINT SETTING (TV)	NOT USED
	1125I SHARP V	100	1125I V SHARPNESS SETTING (TV)	NOT USED
	1125I SHARP H1	100	1125I H SHARPNESS SETTING 1 (TV)	NOT USED
	1125I SHARP H2	100	1125I H SHARPNESS SETTING 2 (TV)	NOT USED
	750P CONT	137	750P CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	750P BRIGHT	128	750P BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	750P COLOR	64	750P COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	750P TINT	140	750P TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	750P SHARP V	100	750P V SHARPNESS SETTING (TV)	NOT USED
	750P SHARP H1	100	750P H SHARPNESS SETTING 1 (TV)	NOT USED
	750P SHARP H2	100	750P H SHARPNESS SETTING 2 (TV)	NOT USED
DVP13	1125I50 CONT	137	1125I/50Hz CONTRAST SETTING (TV)	NOT USED
	1125I50 BRIGHT	128	1125I/50Hz BRIGHTNESS SETTING (TV)	NOT USED
	1125I50 COLOR	64	1125I/50Hz COLOR DENSITY SETTING (TV)	NOT USED
	1125I50 TINT	140	1125I/50Hz TINT SETTING (TV)	NOT USED
	1125I50 SHARP V	100	1125I/50Hz V SHARPNESS SETTING (TV)	NOT USED
	1125I50 SHARP H1	100	1125I/50Hz H SHARPNESS SETTING 1 (TV)	NOT USED
	1125I50 SHARP H2	100	1125I/50Hz H SHARPNESS SETTING 2 (TV)	NOT USED
	750P50 CONT	137	750P/50Hz CONTRAST SETTING (COMPOSITE, S VIDEO)	NOT USED
	750P50 BRIGHT	128	750P/50Hz BRIGHTNESS SETTING (COMPOSITE, S VIDEO)	NOT USED
	750P50 COLOR	64	750P/50Hz COLOR DENSITY SETTING (COMPOSITE, S VIDEO)	NOT USED
	750P50 TINT	140	750P/50Hz TINT SETTING (COMPOSITE, S VIDEO)	NOT USED
	750P50 SHARP V	100	750P/50Hz V SHARPNESS SETTING (TV)	NOT USED
	750P50 SHARP H1	100	750P/50Hz H SHARPNESS SETTING 1 (TV)	NOT USED
	750P50 SHARP H2	100	750P/50Hz H SHARPNESS SETTING 2 (TV)	NOT USED

ADJUSTMENT PROCESS OTHERS DEFAULTS CHART

Page No.	Item	Initial Value	Function	Servicing notes & precautions
BASIC SETTINGS				
TUNER1	AFT UP	1.80	AFT VOLTAGE REFERENCE LEVEL (ALL BANDS)	NOT USED
	AFT DOWN	1.20	AFT VOLTAGE REFERENCE LEVEL (ALL BANDS)	NOT USED
	LSYNC	150	SYNC DETECT THRESHOLD LEVEL (TV)	NOT USED
	HSYNC	162	SYNC DETECT THRESHOLD LEVEL (TV)	NOT USED
	LSYNC2	150	SYNC DETECT THRESHOLD LEVEL (ONLY FOR AFT-EQUIPPED TV CHANNEL SELECTION (1CH))	NOT USED
	HSYNC2	162	SYNC DETECT THRESHOLD LEVEL (ONLY FOR AFT-EQUIPPED TV CHANNEL SELECTION (1CH))	NOT USED
	AVSYNC	1	SYNC DETECT THRESHOLD LEVEL (EXTERNAL INPUT)	
	COMPSYNC	3	SYNC DETECT THRESHOLD LEVEL (COLOR DIFFERENCE INPUT)	NOT USED
	EDS TEST	10	TIME (SEC) UNTIL "NO EDS CLOCK DATA" IS JUDGED	NOT USED
TUNER2	AFT FARTIME	50	CHANNEL PRESET TIME ADJUSTMENT 1	NOT USED
	AFT NEARTIME	30	CHANNEL PRESET TIME ADJUSTMENT 2	NOT USED
	AFT NEARTIME	10	CHANNEL PRESET TIME ADJUSTMENT 3	NOT USED
	AFT 1STEPTIME	10	CHANNEL PRESET TIME ADJUSTMENT 4	NOT USED
	AFT CSYNCTIME	50	CHANNEL PRESET TIME ADJUSTMENT 5	NOT USED
	SYNC ON	10	CHANNEL PRESET TIME SYNC DETECTION: NUMBER OF CONTINUOUS MATCHINGS (↑CH, SEARCH, AIR/CABLE DETECTION, CLOCK SYNC DETECTION)	NOT USED
	SYNC WIDTH	1	CHANNEL PRESET TIME SYNC DETECTION: THRESHOLD LEVEL (SYNC ON WHEN THE MAXIMUM-TO-MINIMUM DIFFERENCE GETS SMALLER THAN THIS)	NOT USED

OTHERS

OTHERS1	L ERROR WAIT	15s	LAMP ERROR DETECT WAIT TIME	NOT USED
	L ERROR H TIME	1.0s	LAMP ERROR DETECT TIME	NOT USED
	TV AUTO GAIN	OFF	AUTOMATIC GAIN SETTING FOR TV	NOT USED
	PWM FREQ	200	DIMMER FREQUENCY SETTING (UNIT: Hz)	NOT USED
	PWM DUTY	0	DIMMER DUTY SETTING	NOT USED
	HOTEL POWERFIX	ON	HOTEL MODE POWER-ON FIX SETTING	NOT USED
	COMP SYSTEM	AUTO	IN-PROCESS COMPONENT SIGNAL SELECTION	NOT USED

THE REMOTE CONTROL CODE IS DISPLAYED AT THE BOTTOM.

OTHERS

OTHERS2	CLOSED CAPTION	15	CLOSED CAPTION THRESH LEVEL	NOT USED

ON US-DESTINED MODELS, AUTOMATIC LOCK IS DISPLAYED IN LINES 2, 3 AND 4 FROM THE BOTTOM.

■ EDID data writing list (for PC)

Address	Description	Format		Data
00	Header	Set to [00h]		00
01		Set to [FFh]		FF
02		Set to [FFh]		FF
03		Set to [FFh]		FF
04		Set to [FFh]		FF
05		Set to [FFh]		FF
06		Set to [FFh]		FF
07		Set to [00h]		00
08	Manufacturer's name	7bit: Set to 0		4D
09		6-2bit: First character	[S]	10
		1,0,7-5bit: Second character	[H]	
		4-0bit: Third character	[P]	
0A	Product code	[7-0bit]	Code=4040	40
0B		[15-8bit]	(US WXGA model)	40
0C	Serial No.	[7-0bit] * when not used. [01h]	No.=Not used	01
0D		[15-8bit] * when not used. [01h]		01
0E		[23-16bit] * when not used. [01h]		01
0F		[31-17bit] * when not used. [01h]		01
10	Production week	0-53 when not used. [00h]	week=Not used	00
11	Production year	year 1990: ex.2006-1990=16=10h	year=2006	10
12	EDID version No.		Version 1	01
13	EDID revision No.	when not revised. [00h]	Revision 3	03
14	Video input	7bit: Analog=[0]/Digital=[1]	[0]	68
		6, 5bit: Signal level 0.700-0.300(1.000V p-p)=[00]	[11]	
		/0.714-0.286(1.000V p-p)=[01]		
		/1.000-0.400(1.400V p-p)=[10]		
		/0.700-0.000(0.700V p-p)=[11]		
		4bit: Black level setup required=[1]/None=[0]	[0]	
		3bit: Hsync, Vsync support=[1]/None=[0]	[1]	
		2bit: Csync (Hsync line) support=[1]/None=[0]	[0]	
		1bit: Sync signal support for green video signal=[1]/None=[0]	[0]	
		0bit: Csync or Vsync at sync (green video signal);	[0]	
		Sawtooth waveform=[1]/Others=[0]		
15	Maximum horizontal image size	1-255cm when not determined [00h]	Horizontal size=44cm	2C
16	Maximum vertical image size	1-255cm when not determined [00h]	Vertical size=25cm	19
17	Gamma characteristic	(gamma*100)-100	gamma=2.2	78
18	Support	7bit: Video signal; Black level, Standby without Hsync=[1]	[0]	28
	(power management)	6bit: Video signal; Black level, Pause without Vsync=[1]	[0]	
		5bit: Video signal; Black level, Off without Hsync and Vsync=[1]	[1]	
		4, 3bit: Monochrome/gray scale display=[00]	[01]	
		/RGB color display=[01]		
		/Non-RGB multi-color display=[10]		
		/Not defined=[11]		
		2, 1, 0bit: Set to [000]	[000]	
19	Red/green low-order 2 bits	7,6bit: Red x 1,0bit	[11]	EF
		5,4bit: Red y 1,0bit	[10]	
		3,2bit: Green x 1,0bit	[11]	
		1,0bit: Green y 1,0bit	[11]	
1A	Blue/white low-order 2 bits	7,6bit: Blue x 1,0bit	[11]	CA
		5,4bit: Blue y 1,0bit	[00]	
		3,2bit: White x 1,0bit	[10]	
		1,0bit: White x 1,0bit	[10]	

1B	Red x (9-2bit)	ex. 0.625 1010000000 [A0h]	Red x=0.640	A3
1C	Red y (9-2bit)		Red y=0.334	55
1D	Green x (9-2bit)		Green x=0.281	47
1E	Green y (9-2bit)	9bit: 2^{-1} 8bit: 2^{-2} : 0bit: 2^{-10}	Green y=0.605	9A
1F	Blue x (9-2bit)		Blue x=0.144	24
20	Blue y (9-2bit)		Blue y=0.071	12
21	White x (9-2bit)		White x=0.280	47
22	White y (9-2bit)		White y=0.288	49
23	Official timing 1	7bit: 720x400@70Hz support=[1] / None=[0] 6bit: 720x400@88Hz support=[1] / None=[0] 5bit: 640x480@60Hz support=[1] / None=[0] 4bit: 640x480@67Hz support=[1] / None=[0] 3bit: 640x480@72Hz support=[1] / None=[0] 2bit: 640x480@75Hz support=[1] / None=[0] 1bit: 800x600@56Hz support=[1] / None=[0] 0bit: 800x600@60Hz support=[1] / None=[0]	[0] [0] [1]VGA/60Hz support [0] [0] [0] [0] [1]SVGA/60Hz support	21
24	Official timing 2	7bit: 800x600@72Hz support=[1] / None=[0] 6bit: 800x600@75Hz support=[1] / None=[0] 5bit: 832x624@75Hz support=[1] / None=[0] 4bit: 1024x768@87Hz support=[1] / None=[0] 3bit: 1024x768@60Hz support=[1] / None=[0] 2bit: 1024x768@70Hz support=[1] / None=[0] 1bit: 1024x768@75Hz support=[1] / None=[0] 0bit: 1280x1024@75Hz support=[1] / None=[0]	[0] [0] [0] [0] [1]XGA/60Hz support [0] [0] [0]	08
25	Official timing 3/ manufacturer's timing	7bit: 1152x870@75Hz support=[1] / None=[0] 6-0bit: Number of original timings, if any, to be counted up as 1 from 6bit	[0] No. of timings= [0000000]	00
26 27	Reference timing ID1 (other than official timing)	(Horizontal effective pixels/8)-31: when not used [01h] 7, 6bit: Aspect ratio 1:1=[00]: when not used [01h] 4:3=[01] 5:4=[10] 16:9=[11] 5-0bit: Refresh rate(Hz)-60	Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
28 29	Reference timing ID2	Same as Reference timing ID1	Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
2A 2B	Reference timing ID3	Same as Reference timing ID1	Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
2C 2D	Reference timing ID4	Same as Reference timing ID1	Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
2E 2F	Reference timing ID5	Same as Reference timing ID1	Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
30 31	Reference timing ID6	Same as Reference timing ID1	Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
32 33	Reference timing ID7	Same as Reference timing ID1	Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
34 35	Reference timing ID8	Same as Reference timing ID1	Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01

36	Details 1/Monitor	Details		0E
37		Clock=79.50 Hz		1F
38		Horizontal pixels=1280 pixels		00
39		Horizontal blanking=384 pixels		80
3A		Vertical lines=768 lines		51
3B		Vertical blanking=30 lines		00
3C		Horizontal offset=64 pixels		1E
3D		Horizontal pulse width=128 pixels		30
3E		Vertical offset=3 lines		40
3F		Vertical pulse width=7 lines		80
40		Horizontal size= mm		37
41		Vertical size= mm		00
42		Horizontal boundary= pixels		00
43		Vertical boundary= lines		00
44		Interlace:		00
45		Stereo:		00
46		Sync signal:		00
47				1C
48	Details 2/Monitor	Same as Details 1		00
49				00
4A				00
4B			FC:Model number	FC
4C				00
4D			"S"	53
4E			"H"	48
4F			"A"	41
50			"R"	52
51			"P"	50
52			" " (space)	20
53			"L"	4C
54			"C"	43
55			"D"	44
56			"T"	54
57			"V"	56
58				0A
59				20
5A	Details 3/Monitor	Same as Details 1		00
5B				00
5C				00
5D				10
5E				00
5F				00
60				00
61				00
62				00
63				00
64				00
65				00
66				00
67				00
68				00
69				00
6A				00
6B				00

6C	Details 4/Monitor			00
6D				00
6E				00
6F				10
70				00
71				00
72				00
73				00
74				00
75				00
76				00
77				00
78				00
79				00
7A				00
7B				00
7C				00
7D				00
7E	Extension flag	[00h]		00
7F	Check sum	128 bytes, 00h when all added	In the case of year=2006	73

■ EDID data writing list (for HDMI)

Address	Description	Format		Data
00	Header	Set to [00h]		00
01		Set to [FFh]		FF
02		Set to [FFh]		FF
03		Set to [FFh]		FF
04		Set to [FFh]		FF
05		Set to [FFh]		FF
06		Set to [FFh]		FF
07		Set to [00h]		00
08	Manufacturer's name	7bit: Set to 0		4D
09		6-2bit: First character	[S]	10
		1,0,7-5bit: Second character	[H]	
		4-0bit: Third character	[P]	
0A	Product code	[7-0bit]	Code=4041	41
0B		[15-8bit]		40
0C	Serial No.	[7-0bit] * when not used. [01h]	No.=Not used	01
0D		[15-8bit] * when not used. [01h]		01
0E		[23-16bit] * when not used. [01h]		01
0F		[31-17bit] * when not used. [01h]		01
10	Production week	0-53 when not used. [01h]	week=Not used	00
11	Production year	year 1990: ex.2006-1990=15=10h	year=2006	10
12	EDID version No.		Version 1	01
13	EDID revision No.	when not revised. [00h]	Revision 3	03
14	Video input	7bit: Analog=[0]/Digital=[1]	[1]	80
		6, 5bit: Signal level 0.700-0.300(1.000V p-p)=[00]	[00]	
		/0.714-0.286(1.000V p-p)=[01]		
		/1.000-0.400(1.400V p-p)=[10]		
		/0.700-0.000(0.700V p-p)=[11]		
		4bit: Black level setup required=[1]/None=[0]	[0]	
		3bit: Hsync, Vsync support=[1]/None=[0]	[0]	
		2bit: Csync (Hsync line) support=[1]/None=[0]	[0]	
		1bit: Sync signal support for green video signal=[1]/None=[0]	[0]	
		0bit: Csync or Vsync at sync (green video signal);	[0]	
		Sawtooth waveform=[1]/Others=[0]		
15	Maximum horizontal image size	1-255cm when not determined [00h]	Horizontal size=44cm	2C
16	Maximum vertical image size	1-255cm when not determined [00h]	Vertical size=25cm	19
17	Gamma characteristic	(gamma*100)-100	gamma=2.2	78
18	Support	7bit: Video signal; Black level, Standby without Hsync=[1]	[0]	0A
	(power management)	6bit: Video signal; Black level, Pause without Vsync=[1]	[0]	
		5bit: Video signal; Black level, Off without Hsync and Vsync=[1]	[0]	
		4, 3bit: Monochrome/gray scale display=[00]	[01]	
		/RGB color display=[01]		
		/Non-RGB multi-color display=[10]		
		/Not defined=[11]		
		2bit: sRGB=[0]	[0]	
		1bit: Preferred timing=[0]	[1]	
		0bit: GTF SUPPORT=[0]	[0]	
19	Red/green low-order 2 bits	7,6bit: Red x 1,0bit	[11]	EF
		5,4bit: Red y 1,0bit	[10]	
		3,2bit: Green x 1,0bit	[11]	
		1,0bit: Green y 1,0bit	[11]	
1A	Blue/white low-order 2 bits	7,6bit: Blue x 1,0bit	[11]	CA
		5,4bit: Blue y 1,0bit	[00]	
		3,2bit: White x 1,0bit	[10]	
		1,0bit: White x 1,0bit	[10]	

1B	Red x (9-2bit)	ex. 0.625 1010000000 [A0h]	1010001000	Red x=0.640	A3
1C	Red y (9-2bit)		0101010101	Red y=0.334	55
1D	Green x (9-2bit)		0011010010	Green x=0.281	47
1E	Green y (9-2bit)	9bit: 2^{-1}	1011001111	Green y=0.605	9A
1F	Blue x (9-2bit)	8bit: 2^{-2}	0010011010	Blue x=0.144	24
20	Blue y (9-2bit)	:	0001010011	Blue y=0.071	12
21	White x (9-2bit)	0bit: 2^{-10}	0100101011	White x=0.280	47
22	White y (9-2bit)		0101001010	White y=0.288	49
23	Official timing 1	7bit: 720x400@70Hz support=[1] / None=[0] 6bit: 720x400@88Hz support=[1] / None=[0] 5bit: 640x480@60Hz support=[1] / None=[0] 4bit: 640x480@67Hz support=[1] / None=[0] 3bit: 640x480@72Hz support=[1] / None=[0] 2bit: 640x480@75Hz support=[1] / None=[0] 1bit: 800x600@56Hz support=[1] / None=[0] 0bit: 800x600@60Hz support=[1] / None=[0]		[0] [0] [0] [0] [0] [0] [0] [0]	00
24	Official timing 2	7bit: 800x600@72Hz support=[1] / None=[0] 6bit: 800x600@75Hz support=[1] / None=[0] 5bit: 832x624@75Hz support=[1] / None=[0] 4bit: 1024x768@87Hz support=[1] / None=[0] 3bit: 1024x768@60Hz support=[1] / None=[0] 2bit: 1024x768@70Hz support=[1] / None=[0] 1bit: 1024x768@75Hz support=[1] / None=[0] 0bit: 1280x1024@75Hz support=[1] / None=[0]		[0] [0] [0] [0] [0] [0] [0] [0]	00
25	Official timing 3/ manufacturer's timing	7bit: 1152x870@75Hz support=[1] / None=[0] 6-0bit: Number of original timings, if any, to be counted up as 1 from 6bit		[0] No. of timings=None [0000000]	00
26 27	Reference timing ID1 (other than official timing)	(Horizontal effective pixels/8)-31: when not used [01h] 7, 6bit: Aspect ratio 1:1=[00]: when not used [01h] 4:3=[01] 5:9=[10] 16:9=[11] 5-0bit: Refresh rate(Hz)-60		Horizontal pixels= [01] Refresh rate=Hz	01 01
28 29	Reference timing ID2	Same as Reference timing ID1		Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
2A 2B	Reference timing ID3	Same as Reference timing ID1		Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
2C 2D	Reference timing ID4	Same as Reference timing ID1		Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
2E 2F	Reference timing ID5	Same as Reference timing ID1		Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
30 31	Reference timing ID6	Same as Reference timing ID1		Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
32 33	Reference timing ID7	Same as Reference timing ID1		Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01
34 35	Reference timing ID8	Same as Reference timing ID1		Horizontal pixels= Aspect ratio= Refresh rate=Hz	01 01

36	Details 1	Pixel clock 10,000 [7-0bit]	Clock=74.25MHz	01
37	Pixel clock	[15-8bit]		1D
38	No. of horizontal pixels: Low-order 8 bits	780h	Horizontal pixels=1920	80
39	Horizontal blanking: Low-order 8bits	118h	Horizontal blanking=280	18
3A	Horizontal pixels/horizontal blanking: High-order 4 bits	7-4bit:Horizontal pixels 11-8bit 3-0bit:Horizontal pixels 11-8bit		71
3B	No. of vertical lines: Low-order 8 bits	21Ch	Vertical lines=540	1C
3C	Vertical blanking: Low-order 8bits	016h	Vertical blanking=22	16
3D	Vertical lines/vertical blanking: High-order 4 bits	7-4bit:Vertical lines 11-8bit 3-0bit:Vertical lines 11-8bit		20
3E	Horizontal sync offset: Low-order 8 bits	058h	Horizontal offset=88	58
3F	Horizontal sync pulse width: Low-order 8 bits	02Ch	Horizontal pulse width=44	2C
40	Vertical sync offset/pulse width: Low-order 4 bits	7-4bit:Offset 3-0bit 02h 3-0bit:Pulse width 3-0bit 05h	Vertical offset=2 Vertical pulse width=5	25
41	Horizontal sync offset/pulse width Vertical sync offset/pulse width: High-order 2 bits	7, 6bit:Horizontal sync offset 9, 8bit 5, 4bit:Horizontal sync pulse width 9, 8bit 3, 2bit:Vertical sync offset 5, 4bit 1, 0bit:Vertical sync pulse width 5, 4bit		00
42	Horizontal image size: Low-order 8 bits	1B8h	Horizontal size=440mm	B8
43	Vertical image size: Low-order 8 bits	FAh	Vertical size=250mm	FA
44	Horizontal/vertical image size: High-order 4 bits	7-4bit:Horizontal image size 11-8bit 3-0bit:Vertical image size 11-8bit		10
45	Horizontal boundary	when not available [00h]	pixels	00
46	Vertical boundary	when not available [00h]	lines	00
47	Flag	7bit: Non-interlace=[0]/Interlace=[1] 6, 5, 0bit: Normal display without stereo=[000] /Field sequential stereo with stereo sync: 1 Right=[010]/Left=[100] /2-way interleaved stereo even-numbered line Right=[011]/Left=[101] /4-way interleaved stereo=[110] /Side by side interleaved stereo=[111] 4, 3bit: Sync signal analog composite=[00] /Bipolar analog composite=[01] /Digital composite=[10] /Digital Hsync, Vsync=[11] 2bit: 4, 3bit=[00]/[01]/[10]; Sawtooth waveform between Hsync and Vsync=[1] 4, 3bit=[11]; Vsync positive pole=[1]/negative pole=[0] 1bit: 4, 3bit=[00]/[01]; Sync signal for RGB video signal=[1]/G only=[0] 4, 3bit=[11]; Hsync positive pole=[1]/negative pole=[0]	[1] [000] [11] [1] [1]	9E
48	Details 2	Pixel clock/10,000 [7-0bit]	Clock=74.25MHz	01
49	Pixel clock	[15-8bit]		1D
4A	No. of horizontal pixels: Low-order 8 bits	500h	Horizontal pixels=1280	00
4B	Horizontal blanking: Low-order 8bits	172h	Horizontal blanking=370	72
4C	Horizontal pixels/horizontal blanking: High-order 4 bits	7-4bit:Horizontal pixels 11-8bit 3-0bit:Horizontal blanking 11-8bit		51
4D	No. of vertical lines: Low-order 8 bits	2D0h	Vertical lines=720	D0
4E	Vertical blanking: Low-order 8bits	01Eh	Vertical blanking=30	1E
4F	Vertical lines/vertical blanking: High-order 4 bits	7-4bit:Vertical lines 11-8bit 3-0bit:Vertical blanking 11-8bit		20
50	Horizontal sync offset: Low-order 8 bits	06Eh	Horizontal offset=110	6E

51	Horizontal sync pulse width: Low-order 8 bits	028h	Horizontal pulse width=40	28
52	Vertical sync offset/pulse width: Low-order 4 bits	7-4bit:Offset 3-0bit 05h 3-0bit:Pulse width 3-0bit 05h	Vertical offset=5 Vertical pulse width=5	55
53	Horizontal sync offset/pulse width Vertical sync offset/pulse width: High-order 2 bits	7,6bit:Horizontal sync offset 9,8bit 5,4bit:Horizontal sync pulse width 9,8bit 3,2bit:Vertical sync offset 5,4bit		00
54	Horizontal image size: Low-order 8 bits	1B8h	Horizontal size= 440mm	B8
55	Vertical image size: Low-order 8 bits	FAh	Vertical size= 250mm	FA
56	Horizontal/vertical image size: High-order 4 bits			10
57	Horizontal image size	0pixels		00
58	Vertical image size	0lines		00
59	Flag		Interlace: Non Stereo : None Sync : Digital [00011110]	1E
5A	Monitor details	Flag=[0] (With monitor details in use)		FC
5B	Flag	Flag=[0] (With monitor details in use)		
5C	Reserve flag	Flag=[0] (With monitor details in use)		
5D	DATA TAG	[FFh]: Monitor serial No. [FEh]: ASCII data characters [FDh]: Monitor range limit Byte5: Minimum vertical rate (integers only) Byte6: Maximum vertical rate (integers only) Byte7: Minimum horizontal frequency (integers only) Byte8: Maximum horizontal frequency (integers only) Byte9: Maximum support pixel clock MHz/10 (Max. FFh) Byte10-17: VESA GTF in use Byte10: GTF not used=[00h] Byte11: GTF not used=[0Ah] Byte12-17: GTF not used=[20h] [FCh]: Monitor name ([0Ah] at end, when blank) [20h] [FBh]: Color characteristic data added [FAh]: Standard timing ID added [F9h-10h]: Not defined [0Fh-00h]: Manufacturer defined		
5E	Flag	Flag=[0] (With monitor details in use)		00
5F	ASCII String	ASCII String=1st character "S"		53
60		ASCII String=2nd character H"		48
61		ASCII String=3rd character "A"		41
62		ASCII String=4th character "R"		52
63		ASCII String=5th character "P"		50
64		ASCII String=6th character <space>		20
65		ASCII String=7th character "H"		48
66		ASCII String=8th character "D"		44
67		ASCII String=9th character "M"		4D
68		ASCII String=10th character "I"		49
69		ASCII String=11th character <LF>		0A
6A		ASCII String=12th character <space>		20
6B		ASCII String=13th character <space>		20
6C	Monitor name	Flag=[0] (With monitor name in use)		00
6D	Flag	Flag=[0] (With monitor name in use)		00
6E	Flag	Flag=[0] (With monitor name in use)		00
6F	DATA TAG	Same as Monitor details		FD
70	Flag	Flag=[0] (With monitor details in use)		00
71	Minimum Vt rate	31h	MIN.V rate=49Hz	31
72	Maximum Vt rate	3Dh	MAX.V rate=61Hz	3D

73	Minimum horizontal frequency	1Fh	MIN.H rate=31kHz	1F
74	Maximum horizontal frequency	2Eh	MAX.H rate=46kHz	2E
75	Maximum support frequency	80MHz/10		08
76	FOR GTF	Set=00h if unused for GTF		00
77		Set=00h if unused for GTF (Rev1:Set=0Ah)		0A
78		Set=00h if unused for GTF (Rev1:Set=20h)		20
79				20
7A				20
7B				20
7C				20
7D				20
7E	Extension flag	[00h]		01
7F	Check sum	128 bytes, 00h when all added		94
80	CEA extension header	TAG		02
81		Revision Number		03
82		Detailed Timing Blocks start at Byte		1C
		Additional details starting address specified (address-80h)		
83		Native Format (DTV Monitor Support)	Support	71
		7bit(underscan) Underscan supported	underscan [0]	
		6bit(audio) Basic audio supported	audio [1]	
		5bit(YCbCr 4:4:4) YCbCr other than RGB 4:4:4	YCbCr 4:4:4 [1]	
		4bit(YCbCr 4:2:2) YCbCr other than RGB 4:2:2	YCbCr 4:2:2 [1]	
		Below 3bit:		
		Total number of conventional formats with 18-byte detailed description	Total Format [1]	
84	CEA Data Block Collection	7-5bit: Video Tag Code Code [0]:Reserved [1]:Audio Data Block [2]:Video Data Block [3]:Vendor Specific Data Block [4]:Speaker Allocation Data Block [5-7]:Reserved 4-0bit: Length No. of bytes for supporting	Code [2] Length [9] [00001001] (Video data code declared)	49
85	Video Short Block Description	Video Codes [1]:640*480@60p (4:3) [2]:720*480@60p (4:3) [3]:720*480@60p (16:9) [4]:1280*720@60p (16:9) [5]:1920*1080@60i (16:9) [6]:720(1440)*480i (4:3) [7]:720(1440)*480i (16:9) [8]:720(1440)*240p (4:3) [9]:720(1440)*240p (16:9) [10]:(2880)*480@60i (4:3) [11]:(2880)*480@60i (16:9) [12]:(2880)*240@60p (4:3) [13]:(2880)*240@60p (16:9) [14]:1440*480@60p (4:3) [15]:1440*480@60p (16:9) [16]:1920*1080@60p (16:9) [17]:720*576@50p (4:3) [18]:720*576@50p (16:9) [19]:1280*720@50p (16:9) [20]:1920*1080@50i (16:9) [21]:720(1440)*576@50i (4:3) [22]:720(1440)*576@50i (16:9) [23]:720(1440)*288@50p (4:3) [24]:720(1440)*288@50p (16:9) [25]:2880*576@50i (4:3)	[133]	85

		[26]:2880*576@50i (16:9) [27]:2880*288@50p (4:3) [28]:2880*288@50p (16:9) [29]:1440*576@50p (4:3) [30]:1440*576@50p (16:9) [31]:1920*1080@50p (16:9) [32]:1920*1080@24p (16:9) [33]:1920*1080@25p (16:9) [33]:1920*1080@30p (16:9) : : : (Others below) : : : : : : 7bit:native code		
86			[4]	04
87			[3]	03
88			[2]	02
89			[1]	01
8A			[20]	14
8B			[19]	13
8C			[18]	12
8D			[17]	11
8E	CEA Data Block Collection	Audio Data Block	Code [1] Length [3] [00100011]	23
8F	Audio Short Block Description	① CEA Short Audio Descriptor for uncompressed audio (Uncompressed audio data) 7bit:Reserved 6-3bit:Audio Format Code = [0001] 2-0bit:Max Number of channels -1 ② CEA Short Audio Descriptor for compressed audio (Compressed audio data) 7bit:Reserved 6-3bit:Audio Format Code [0]:Reserved [1]:Linear PCM (eg.IEC60958) [2]:AC-3 [3]:MPEG1 (Layers 1&2) [4]:MP3 (MPEG3 Layer 3) [5]:MPEG2 (multichannel) [6]:AAC [7]:DTC [8]:ATRAC [9]:Reserved for audio format 9 : [14]:Reserved for audio format 14 [15]:Reserved 2-0bit:Max Number of channels -1	① [00001001] PCM	09
90		Audio Sampling Frequency 7bit: Reserved 6bit: 192kHz 5bit: 176kHz(176.4kHz) 4bit: 96kHz 3bit: 88kHz(88.2kHz) 2bit: 48kHz 1bit: 44kHz(44.1kHz) 0bit: 32kHz	48kHz [00000111] 44.1kHz 32kHz	07

91		① CEA Short Audio Descriptor for uncompressed audio (Uncompressed audio data) 7-3bit:Reserved (Shall be 0) Audio Sample Size 2bit: 24bit 1bit: 20bit 0bit: 16bit ② CEA Short Audio Descriptor for compressed audio (Compressed audio data) 7-0bit:Maximum bit rate divided by 8kHz	① 24bit [00000111] 20Bit 16Bit	07
92	CEA Data Block Collection	Speaker Allocation Data Block	Code [4] Length [3] [10000011]	83
93 94 95	Speaker Allocation Data Block Payload	Speaker Placement 7bit:Reserved 6bit:RLC/RRC (Rear Left/Right Center) 5bit:FLC/FRC (Front Left/Right Center) 4bit:RC (Rear Center) 3bit:RL/RR (Rear Left/Right) 2bit:FC (Front Center) 1bit:LFE (Low Frequency Effect) 0bit:FL/FR (Front Left/Right) Reserved (Shall be 0) Reserved (Shall be 0)	FL/FR [00000001]	01
96	CEA Data Block Collection	Vendor Specific Data Block	Code [3] Length [5] [01100101]	65
97 98 99 9A 9B	Vendor Specific Data Block	24-bit IEEE Registration Identifier = [0x000C03] Components of Source Physical Address	7-0bit [03] 15-8bit [0C] 24-16bit [00] [10] [00]	03 0C 00 10 00
9C 9D	Details 3 Pixel clock	Pixel clock/10,000 [7-0bit] [15-8bit]	Clock=27.00MHz	8C 0A
9E	No. of horizontal pixels: Low-order 8 bits	2D0h	Horizontal pixels=720	D0
9F	Horizontal blanking: Low-order 8bits	08Ah	Horizontal blanking=138	8A
A0	Horizontal pixels/horizontal blanking: High-order 4 bits	7-4bit:Horizontal pixels 11-8bit		20
A1	No. of vertical lines: Low-order 8 bits	1E0h	Vertical lines=480	E0
A2	Vertical blanking: Low-order 8bits	02Dh	Vertical blanking=45	2D
A3	Vertical lines/vertical blanking: High-order 4 bits	7-4bit:Vertical lines 11-8bit 3-0bit:Vertical blanking 11-8bit		10
A4	Horizontal sync offset: Low-order 8 bits	010h	Horizontal offset=16	10
A5	Horizontal sync pulse width: Low-order 8 bits	03Eh	Horizontal pulse width=62	3E
A6	Vertical sync offset/pulse width: Low-order 4 bits	09h 06h 3-0bit:Pulse width 3-0bit	Vertical offset=9 Vertical pulse width=6	96
A7	Horizontal sync offset/pulse width Vertical sync offset/pulse width: High-order 2 bits	7,6bit:Horizontal sync offset 9,8bit 5,4bit:Horizontal sync pulse width 9,8bit 3,2bit:Vertical sync offset 5,4bit 1,0bit:Vertical sync pulse width 5,4bit		80
A8	Horizontal image size: Low-order 8 bits	1B8h	Horizontal size= 440mm	B8
A9	Vertical image size: Low-order 8 bits	FAh	Vertical size= 250mm	FA

AA	Horizontal/vertical image size: High-order 4 bits	7-4bit:Horizontal image size 11-8bit 3-0bit:Vertical image size 11-8bit		10
AB AC	Horizontal boundary Vertical boundary	when not available [00h] when not available [00h]	0pixels 0lines	00 00
AD	Flag	7bit: Non-interlace=[0]/Interlace=[1] 6, 5, 0bit: Normal display without stereo=[000] /Field sequential stereo with stereo sync: 1Right=[010]/Left=[100] /2-way interleaved stereo even-numbered line Right=[011]/Left=[101] /4-way interleaved stereo=[110] /Side by side interleaved stereo=[111] 4, 3bit: Sync signal analog composite=[00] /Bipolar analog composite=[01] /Digital composite=[10] /Digital Hsync, Vsync=[11] 2bit: 4, 3bit=[00]/[01]/[10]; Sawtooth waveform between Hsync and Vsync=[1] 4, 3bit=[11]; Vsync positive pole=[1]/negative pole=[0] 1bit: 4, 3bit=[00]/[01]; Sync signal for RGB video signal=[1]/G only=[0] 4, 3bit=[11]; Hsync positive pole=[1]/negative pole=[0]	[0] [000] [11] [0] [0]	18
AE AF	Details 4 Pixel clock	Pixel clock/10,000 [7-0bit] [15-8bit]	Clock=27.00MHz	8C 0A
B0	No. of horizontal pixels: Low-order 8 bits	2D0h	Horizontal pixels=720	D0
B1	Horizontal blanking: Low-order 8bits	090h	Horizontal blanking=144	90
B2	Horizontal pixels/horizontal blanking: High-order 4 bits	7-4bit:Horizontal pixels 11-8bit 3-0bit:Horizontal blanking 11-8bit		20
B3	No. of vertical lines: Low-order 8 bits	240h	Vertical lines=576	40
B4	Vertical blanking: Low-order 8bits	031h	Vertical blanking=49	31
B5	Vertical lines/vertical blanking: High-order 4 bits	7-4bit:Vertical lines 11-8bit 3-0bit:Vertical blanking 11-8bit		20
B6 B7	Horizontal sync offset: Low-order 8 bits Horizontal sync pulse width: Low-order 8 bits	0Ch 40h	Horizontal offset=12 Horizontal pulse width=64	0C 40
B8	Vertical sync offset/pulse width: Low-order 4 bits	05h 7-4bit:Offset 3-0bit 05h 3-0bit:Pulse width 3-0bit	Vertical offset=5 Vertical pulse width=5	55
B9	Horizontal sync offset/pulse width Vertical sync offset/pulse width: High-order 2 bits	7,6bit:Horizontal sync offset 9,8bit 5,4bit: Horizontal sync pulse width 9,8bit 3,2bit:Vertical sync offset 5,4bit 1,0bit:Vertical sync pulse width 5,4bit		00
BA	Horizontal image size: Low-order 8 bits	1B8h	Horizontal size=440mm	B8
BB	Vertical image size: Low-order 8 bits	FAh	Vertical size=250mm	FA
BC	Horizontal/vertical image size: High-order 4 bits	7-4bit:Horizontal image size 11-8bit 3-0bit: Vertical image size11-8bit		10
BD	Horizontal boundary	when not available [00h]	pixels	00
BE	Vertical boundary	when not available [00h]	lines	00
BF	Flag		Interlace: Inter Stereo: None Sync: Digital [10011000]	18
C0	Details 5	Pixel clock/10,000 [7-0bit]	Clock=74.25MHz	01
C1	Pixel clock	[15-8bit]		1D

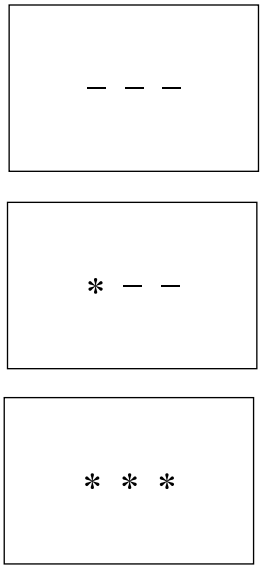
C2	No. of horizontal pixels: Low-order 8 bits	500h	Horizontal pixels=1280	00
C3	Horizontal blanking: Low-order 8bits	2BCh	Horizontal blanking=700	BC
C4	Horizontal pixels/horizontal blanking: High-order 4 bits	7-4bit:Horizontal pixels 11-8bit 3-0bit:Horizontal blanking 11-8bit		52
C5	No. of vertical lines: Low-order 8 bits	2D0h	Vertical lines=720	D0
C6	Vertical blanking: Low-order 8bits	01Eh	Vertical blanking=30	1E
C7	Vertical lines/vertical blanking: High-order 4 bits	7-4bit:Vertical lines 11-8bit 3-0bit:Vertical blanking 11-8bit		20
C8	Horizontal sync offset: Low-order 8 bits	1B8h	Horizontal offset=440	B8
C9	Horizontal sync pulse width: Low-order 8 bits	028h	Horizontal pulse width=40	28
CA CB	Vertical sync offset/pulse width: Low-order 4 bits Horizontal sync offset/pulse width Vertical sync offset/pulse width: High-order 2 bits	05h 7-4bit:Offset 3-0bit 05h 3-0bit:Pulse width 3-0bit 7,6bit:Horizontal sync offset 9,8bit 5,4bit:Horizontal sync pulse width 9,8bit 3,2bit:Vertical sync offset 5,4bit 1,0bit:Vertical sync pulse width 5,4bit	Vertical offset=5 Vertical pulse width=5	55 40
CC	Horizontal image size: Low-order 8 bits	1B8h	Horizontal size=440mm	B8
CD	Vertical image size: Low-order 8 bits	FAh	Vertical size=250mm	FA
CE	Horizontal/vertical image size: High-order 4 bits	7-4bit:Horizontal image size 11-8bit 3-0bit:Vertical image size 11-8bit		10
CF	Horizontal boundary	when not available [00h]	pixels	00
D0	Vertical boundary	when not available [00h]	lines	00
D1	Flag		Interlace: Non Stereo: None Sync: Digital [00011110]	1E
D2 D3	Details 6 Pixel clock	Pixel clock/10,000 [7-0bit] [15-8bit]	Clock=74.25MHz	01 1D
D4	No. of horizontal pixels: Low-order 8 bits	780h	Horizontal pixels=1920	80
D5	Horizontal blanking: Low-order 8bits	2D0h	Horizontal blanking=720	D0
D6	Horizontal pixels/horizontal blanking: High-order 4 bits	7-4bit:Horizontal pixels 11-8bit		72
D7	No. of vertical lines: Low-order 8 bits	21Ch	Vertical lines=540	1C
D8	Vertical blanking: Low-order 8bits	016h	Vertical blanking=22	16
D9	Vertical lines/vertical blanking: High-order 4 bits	7-4bit:Vertical lines 11-8bit 3-0bit:Vertical blanking 11-8bit		20
DA	Horizontal sync offset: Low-order 8 bits	210h	Horizontal offset=528	10
DB	Horizontal sync pulse width: Low-order 8 bits	02Ch	Horizontal pulse width=44	2C
DC	Vertical sync offset/pulse width: Low-order 4 bits	02h 7-4bit:Offset 3-0bit 05h 3-0bit:Pulse width 3-0bit	Vertical offset=2 Vertical pulse width=5	25
DD	Horizontal sync offset/pulse width Vertical sync offset/pulse width: High-order 2 bits	7,6bit:Horizontal sync offset 9,8bit 5,4bit:Horizontal sync pulse width 9,8bit 3,2bit:Vertical sync offset 5,4bit 1,0bit:Vertical sync pulse width 5,4bit		80
DE	Horizontal image size: Low-order 8 bits	1B8h	Horizontal size=440mm	B8
DF	Vertical image size: Low-order 8 bits	FAh	Vertical size=250mm	FA

E0	Horizontal/vertical image size: High-order 4 bits	7-4bit:Horizontal image size 11-8bit 3-0bit:Vertical image size 11-8bit		10
E1	Horizontal boundary	when not available [00h]	0pixels	00
E2	Vertical boundary	when not available [00h]	0lines	00
E3	Flag		Interlace: Non Stereo: None Sync: Digital [10011110]	9E
E4		Remaining bytes=00		00
E5				00
E6				00
E7				00
E8				00
E9				00
EA				00
EB				00
EC				00
ED				00
EE				00
EF				00
F0				00
F1				00
F2				00
F3				00
F4				00
F5				00
F6				00
F7				00
F8				00
F9				00
FA				00
FB				00
FC				00
FD				00
FE		Last padding byte		00
FF	Extension check sum	address 80h~FFh		7B

PUBLIC MODE SETTING PROCEDURE

1. How to start Public Mode

- There are the following two ways to get the public mode setup screen displayed.
  ① In the adjustment process mode, turn on "PUBLIC MODE". Also press the "CH (∧)" and "VOL (+)" keys on the set at once and turn on the power.
  ② 1) Press the "INPUT" and "VOL (+)" keys on the set at once and turn on the power.
  2) Get the password input screen displayed.



Procedure

- The input starts with the leftmost digit.
- Use the numeric keys [1] thru [9] and [10/0] keys on the remote controller. The other keys are not acceptable.
- With a numeric-key input, "–" will change to "*". The input position will move one digit to the right.
- With all the 3 digits entered, the password will be verified.

3) The 3-digit password is now verified.
The password [0] [2] [7] provides for the public mode screen. (This screen comes on with whatever adjustment process settings.)
With any other passwords, the screen changes to the normal mode.

2. How to exit Public Mode

There are the following ways to quit the public mode setup screen.

- Turn off "PUBLIC MODE" in the adjustment process mode. (☆) ← This way alone is not for quitting the setup screen, but for quitting the mode itself.
- Turn off the power with the "POWER" key. (★)
- Select "ENTER". (★)
- Move the cursor to "RESET" and press the "FLASHBACK" key. (Back to the normal mode screen)(☆)

★ ... "PUBLIC MODE" stays on in the adjustment process mode.
☆ ... The settings will be back to the factory ones.

3. Public Mode Setting Values

- With the factory settings made, the public mode settings get initialized. (The adjustment process remains intact.)

4. Public Mode Menu

The guidance is not displayed onscreen.
Setup procedure

- To move the cursor up and down, use the "cursor UP/DOWN" key (remote controller) and "CH (∧)/(∨)" key (remote controller and set).
- To change the settings, use the "cursor RIGHT/LEFT" key (remote controller) and "VOL (+)/(–)" key (remote controller and set).
- To save new settings, keep the cursor at "Enter" and use the "cursor RIGHT/LEFT" key (remote controller) and "VOL (+)/(–)" key (remote controller and set).

PUBLIC MODE		
MAXIMUM VOLUME	[60]	
VOLUME FIXED	[VARIABLE]	
VOLUME FIXED LEVEL	[20]	
RC BUTTON	[RESPOND]	
PANEL BUTTON	[RESPOND]	
MENU BUTTON	[RESPOND]	
ON SCREEN DISPLAY	[YES]	
INPUT MODE START	[NORMAL]	
INPUT MODE FIXED	[VARIABLE]	
RESET		
COPY MAIN ▶ EEPROM	[STANDBY]	Not Used
COPY EEPROM ▶ MAIN	[STANDBY]	
ENTER		

5. On Setting Items

* "EZ-SETUP" discussed below indicates "EZ-SETUP after the first power-on".

(1) MAXIMUM VOLUME

Selection	Adjustment from 1 to 60 (no loop)
Default	60
Explanation	Sound volume can not be adjusted higher than the preset value.
Limit in Setting	• When the sound volume is set lower than 59, only figures are displayed and the sound volume bar is not displayed. • The maximum sound volume for ON-timer (Wake up timer) is limited also to the preset value.
Exception	• In the item "VOLUME" of adjustment process, the sound volume can be set freely irrespective of this setting.
Remarks	• Setting is valid only for the speakers of the unit. (As for the headphone, the sound volume can be set up to 60 irrespective of the limit.) • In line output (sound volume variable), the sound volume can be adjusted from -60 to 0 irrespective of pre-adjusted value. • When the sound volume is set higher than the MAX setting by the adjusting process or headphone, the sound volume control operation is prohibited for turn-up and the sound volume should be turned down to MAX in this state.

(2) VOLUME FIXED

Selection	Selection between "Variable" and "Fixed" (loop provided)
Default	Variable
Explanation	Sound volume is fixed and made invariable.
Limit in Setting	• The sound volume for the ON-timer (Wake up timer) is fixed also without display of menu. Besides, the setting is made impossible. (Basically, the menu is not displayed.) • The following keys become invalid: • Sound volume Up/Down (VOL +/-) [for both remote control and the unit] • Mute (MUTE)
Exception	• In the item "VOLUME" of adjustment process, the sound volume can be set freely irrespective of this setting.
Remarks	• In "Variable" setting, the sound volume had been conventionally set at 1 but this operation has been abolished (and follows the last memory). • The sound volume for the ON-time is not set at 1 either and the sound volume set value of the ON-timer before executing the hotel mode is held. • Setting is valid only for the speakers of the unit. (As for the headphone, the sound volume can be set up to 60 irrespective of the limit.) • In line output (sound volume variable), the sound volume can be adjusted from -60 to 0 irrespective of pre-adjusted value. • As for sound volume fixing and sound volume MAX level, the sound volume fixing has priority. • Once the sound volume has been changed by adjustment process or headphone, it should be set back to the sound volume preset by sound volume fixing level when the adjustment process ends or when the headphone is removed.

(3) VOLUME FIXED LEVEL

Selection	Adjustment from 1 to 60 (no loop)
Default	20
Explanation	The sound volume to be fixed by "Volume fixed" is determined.
Limit in Setting	None
Exception	None
Remarks	Setting is valid only when "Volume fixed" is selected for "fixed". This must be confirmed actually by changing also the sound volume in accordance with setting.

(4) R/C BUTTON

Selection	Selection between "Respond" , "Limited" and "No respond" (loop provide)
Default	Respond
Explanation	Keys acceptable by remote control are limited or reception of keys can be prohibited.
Limit in Setting	①In "limited" setting, only power ON/OFF, sound volume ▲▼, tuning ▲▼ and BACKLIGHT (brightness sensor) are accepted. ②In "No respond" setting, all the keys (including the power key) are not accepted.
Exception	• Adjustment process, factory setting, inspection process and hotel only keys are valid irrespective of setting. • All the keys can be used in adjustment process, inspection mode and hotel menu irrespective of setting. • All the keys can be used also in the initial EZ-Setup after power-ON irrespective of setting.
Remarks	

(5) PANEL BUTTON

Selection	Selection between "Respond" and "No respond" (loop provide)
Default	Respond
Explanation	All the operations by keys (except the power key) of the unit can be invalidated.
Limit in Setting	
Exception	• Inspection mode and hotel menu mode can be started irrespective of setting. • All the keys can be used in adjustment process, inspection mode and hotel menu irrespective of setting. • In U.S.A model, all the keys can be used also in the initial EZ-Setup after power-ON irrespective of setting.
Remarks	

(6) MENU BUTTON

Selection	Selection between "Respond" and "No respond" (loop provide)
Default	Respond
Explanation	In "No respond" setting, the menu operation by the menu key of the remote control and the menu key of the unit are invalidated.
Limit in Setting	• ON-timer (Wakeup Timer) is turned OFF. • The following keys become invalid. Wake-up timer and clock setting keys and all of the direct change keys to menu display
Exception	• Inspection mode and hotel menu mode can be started irrespective of setting. • All the keys can be used in adjustment process, inspection mode and hotel menu irrespective of setting. • All the keys can be used also in the initial EZ-Setup after power-ON irrespective of setting.
Remarks	

(7) ON SCREEN DISPLAY

Selection	Selection between "Yes" , "Limited" (loop provide)
Default	Yes
Explanation	The following OSD displays are made ineffective. Displays of menu group, channel call, sound volume bar and direct key call
Limit in Setting	• ON-timer (Wake-up timer) is cleared and set to "OFF". • Set time of the OFF-timer (SLEEP TIMER) is cleared. • Setting of the no-signal power-OFF (AUTO POWER OFF) is cleared to "OFF". • Setting of the no-operation power-OFF is cleared to "OFF". • Keys falling under any of the following items become invalid. ①Appearance of screen changes and the sound changes. ②Personal functions which are hard to restore. Ex.) Screen display, menu, OFF-timer, ON-timer, AV MODE, screen size switching, clock setting, treble emphasis, AUDIO ONLY, sound changeover, LANGUAGE, CLOSED CAPTION
Others	• Simple input switching is generated. Those which are restored soon after leaving as they are and may be requested for change by customer are not prohibited. Ex.) Brightness sensor (BACKLIGHT) and PIC. FLIP
Exception	• Such a caution which is displayed independently is displayed as it is. Non-responding signal caution, V-Chip caution and power-ON fixing caution
Remarks	• In "No" setting, the setting of "SOUND ONLY MODE" is changed to "OFF" and selecting operation is made prohibited. • When CC has already been ON, CLOSED CAPTION is displayed.

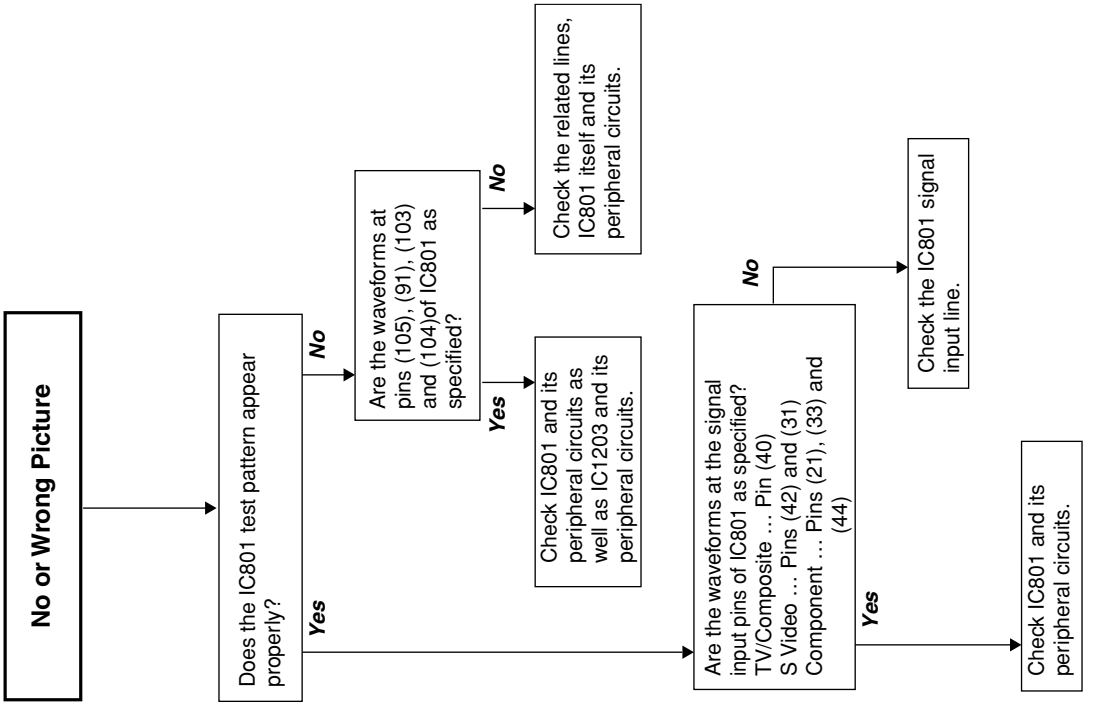
(8) INPUT MODE START

Selection	Selection between "Normal" , "TV (CH∗)" "COMPONENT" "AV1" and "AV2" (loop provide)
Default	Normal
Explanation	In power-ON, the input source to be started or channel can be set. (In standard mode, the operation follows the last memory.)
About options	• All the input sources in the model are made selectable. • When the input/output switchable input source is selected and the input source is set to output, the setting of input/output switching is changed to input at the execution of hotel menu. In addition, the input/output switching by menu is prohibited. • In TV mode, the display of all channels is stopped and it is treated as an input source. At this time, the channel to be set follows the last memory and the content of the last memory is included in the notation by options. Ex.) TV (CH2), TV (CH4) etc. • The order of appearance of options in the hotel menu should agree with the order of toggles by input switching key.
Limit in Setting	• The display of channel setting menu and the channel setting operation are prohibited (except for MCL).
Exception	• In the start by "ON-timer (Wake-up timer)", the channel set by ON-timer (Wake-up timer) has priority.
Remarks	• In setting at "Normal", the setting of "Input mode fixed" is changed to "Variable" and selection should be prohibited.

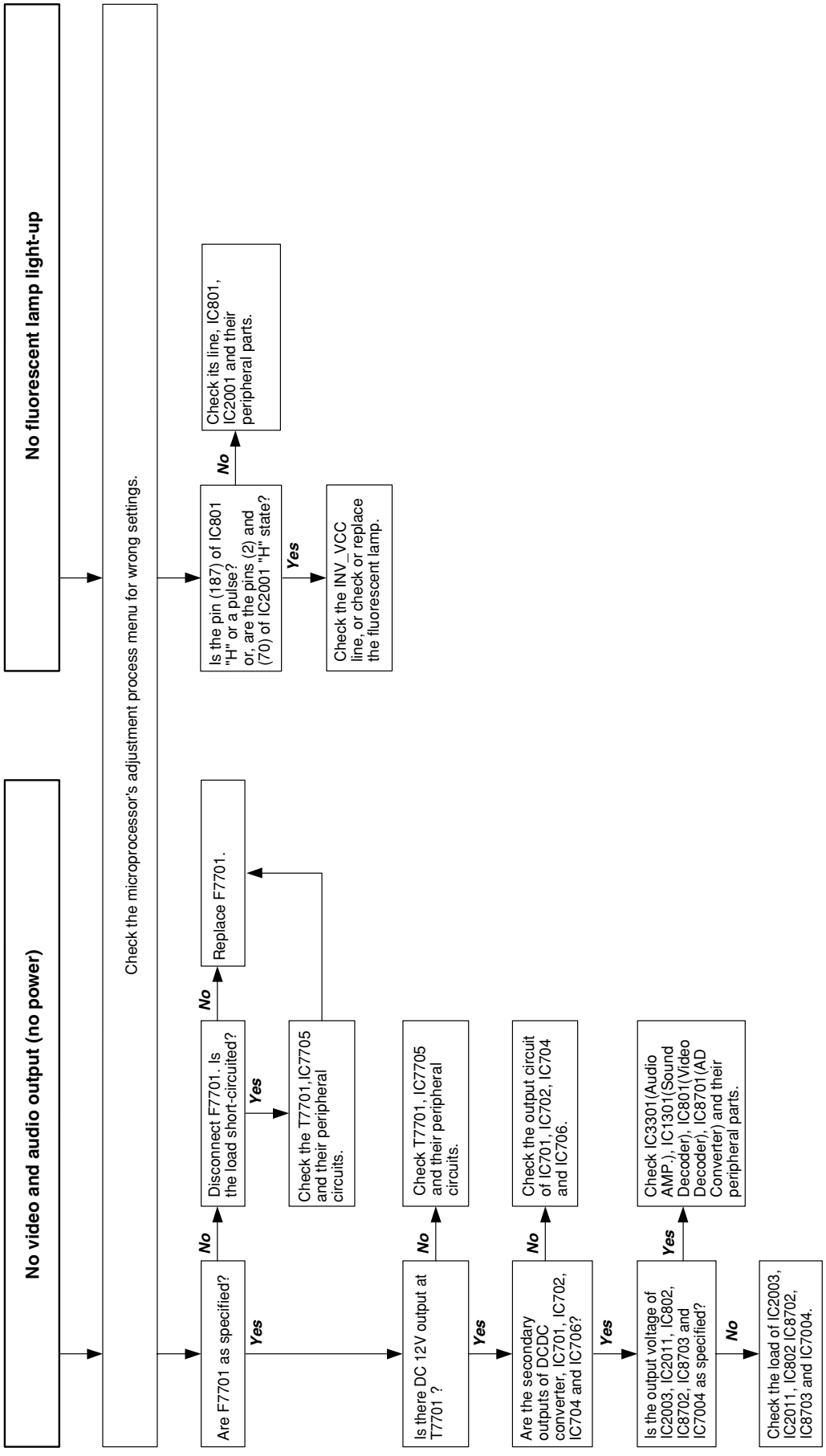
(9) INPUT MODE FIXED

Selection	Selection between "Variable" and "Fixed" (loop provide)
Default	– (Variable)
Explanation	The input mode is fixed at the input source or the channel set at the "Input mode start" in 9 and other input sources and channels can be made non-selectable.
Limit in Setting	• With the execution of hotel mode, the input source is forced to change to that set by "Input mode start" and the channel switching and input switching are prohibited thereafter. • ON-timer's (Wake-up timer) channel items are not displayed or the operation is prohibited. (Basically, they are not displayed.) • The following keys are invalidated. CH ▲▼, direct tuning button, FLASHBACK, input ∗However, the keys (input switching and CH ▲▼ keys) of the unit for menu operation remain valid.
Exception	None
Remarks	• In the following case, setting is cancelled and mode is changed to "Variable". ①When the setting of "Input mode start" is set to "Standard (Normal)"

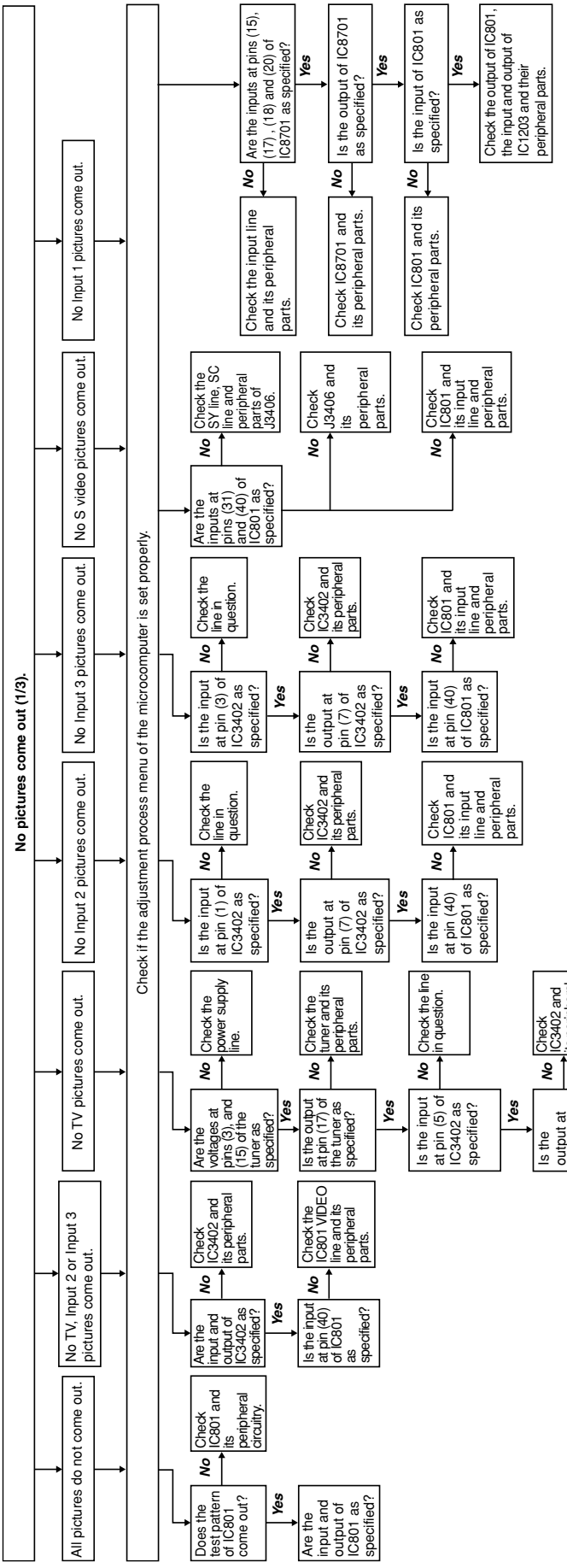
TROUBLE SHOOTING TABLE


No or Wrong Picture
Does the IC801 test pattern appear properly?
No
Are the waveforms at pins (105), (91), (103) and (104)of IC801 as specified?
No
Check the related lines, IC801 itself and its peripheral circuits.
Yes
Check IC801 and its peripheral circuits as well as IC1203 and its peripheral circuits.
Yes
Are the waveforms at the signal input pins of IC801 as specified?
TV/Composite ... Pin (40)
S Video ... Pins (42) and (31)
Component ... Pins (21), (33) and (44)
No
Check the IC801 signal input line.
Yes
Check IC801 and its peripheral circuits.

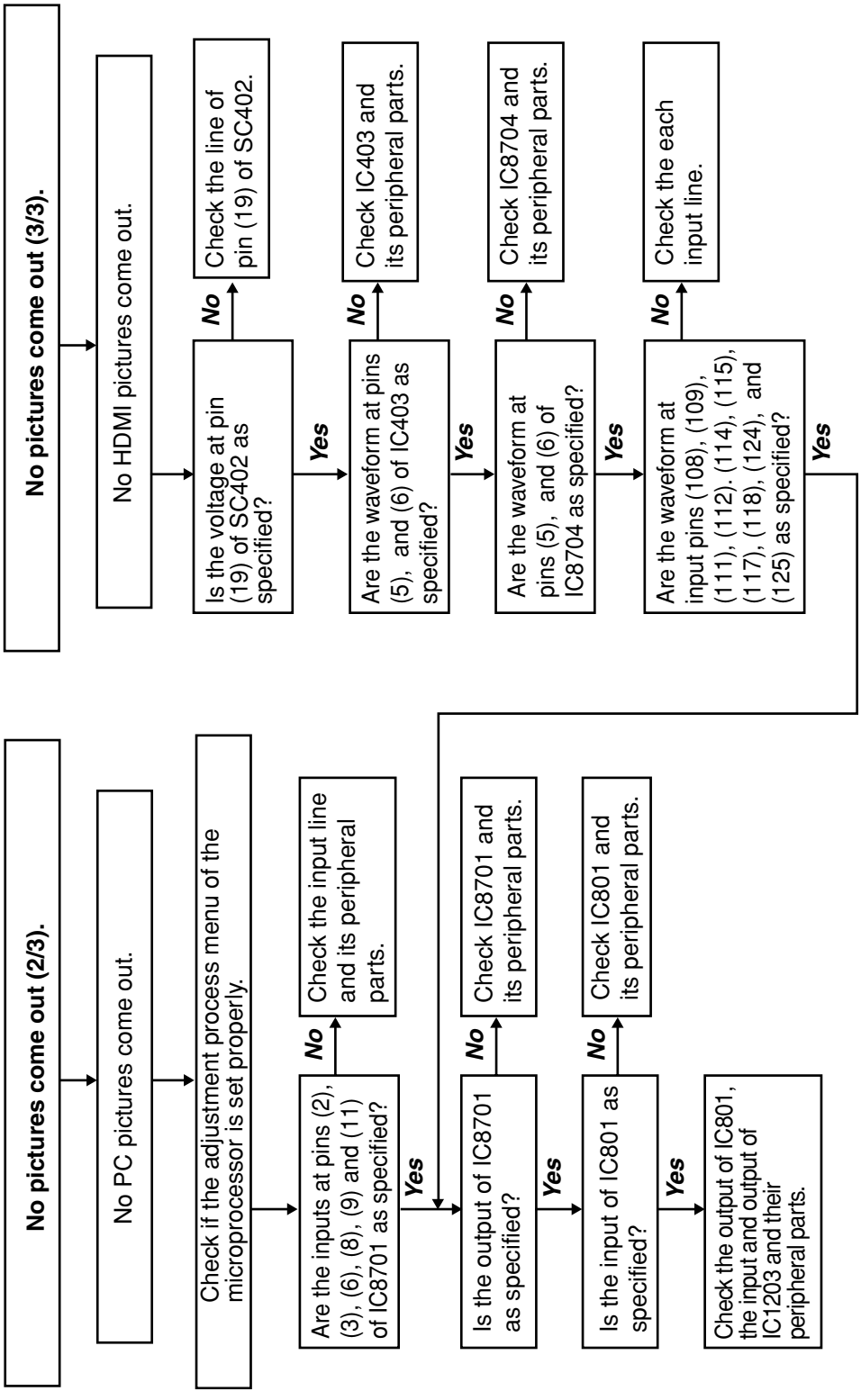
TROUBLE SHOOTING TABLE (Continued)


No video and audio output (no power)
Check the microprocessor's adjustment process menu for wrong settings.
Are F7701 as specified?
No
Disconnect F7701. Is the load short-circuited?
No
Replace F7701.
Yes
Check the T7701,IC7705 and their peripheral circuits.
Yes
Is there DC 12V output at T7701 ?
No
Check T7701, IC7705 and their peripheral circuits.
Yes
Are the secondary outputs of DCDC converter, IC701, IC702, IC704 and IC706?
No
Check the output circuit of IC701, IC702, IC704 and IC706.
Yes
Is the output voltage of IC2003, IC2011, IC802, IC8702, IC8703 and IC7004 as specified?
Yes
Check IC3301(Audio AMP.), IC1301(Sound Decoder), IC801(Video Decoder), IC8701(AD Converter) and their peripheral parts.
No
Check the load of IC2003, IC2011, IC802 IC8702, IC8703 and IC7004.
No fluorescent lamp light-up
Is the pin (187) of IC801 "H" or a pulse? or, are the pins (2) and (70) of IC2001 "H" state?
No
Check its line, IC801, IC2001 and their peripheral parts.
Yes
Check the INV_VCC line, or check or replace the fluorescent lamp.

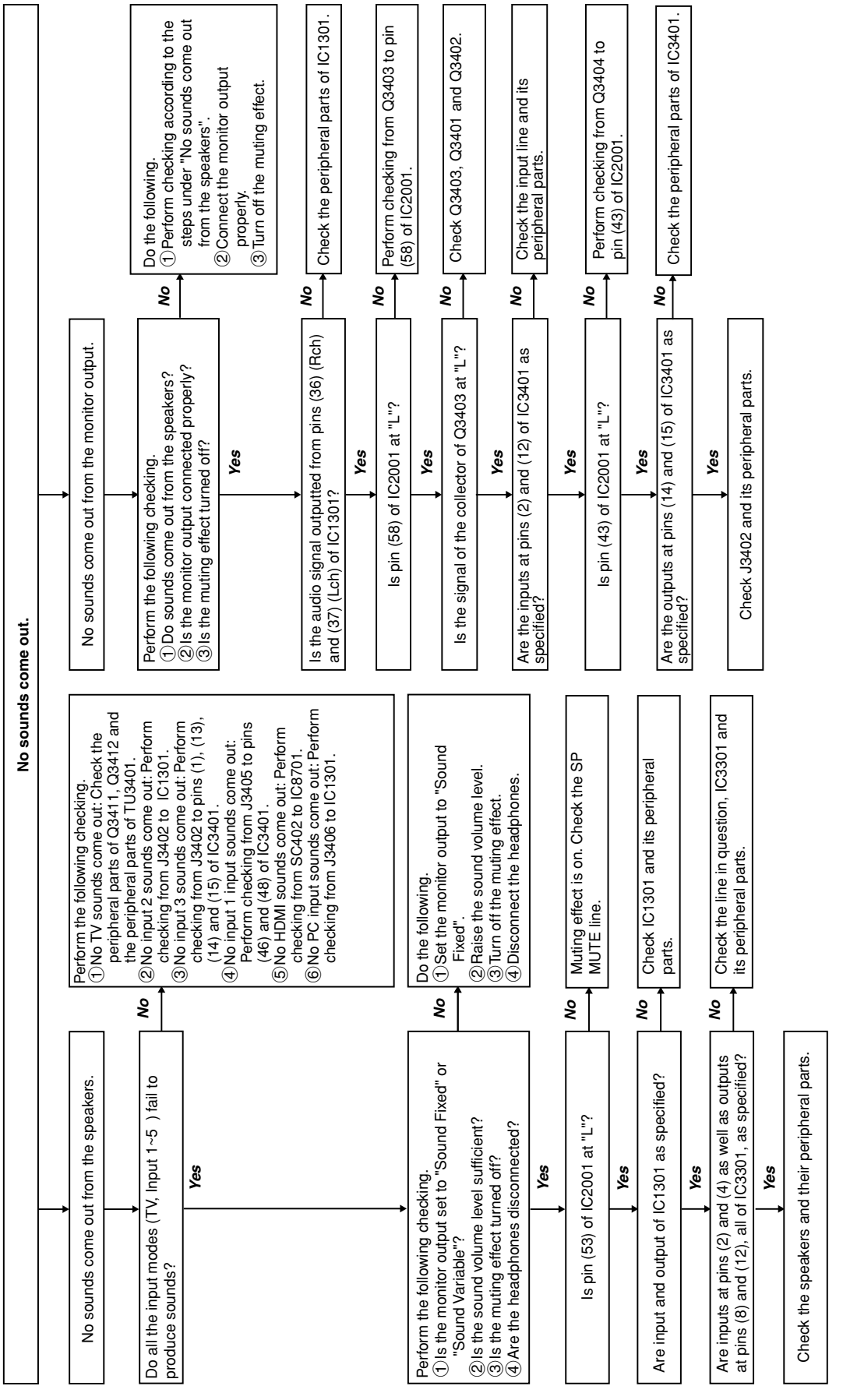
TROUBLE SHOOTING TABLE (Continued)


No pictures come out (1/3).
All pictures do not come out.
Does the test pattern of IC801 come out?
No
Check IC801 and its peripheral circuitry.
Yes
Are the input and output of IC801 as specified?
No TV, Input 2 or Input 3 pictures come out.
Are the input and output of IC3402 as specified?
No
Check IC3402 and its peripheral parts.
Yes
Is the input at pin (40) of IC801 as specified?
No
Check IC801 VIDEO line and its peripheral parts.
Yes
No TV pictures come out.
Are the voltages at pins (3), and (15) of the tuner as specified?
No
Check the power supply line.
Yes
Is the output at pin (17) of the tuner as specified?
No
Check the tuner and its peripheral parts.
Yes
Is the input at pin (5) of IC3402 as specified?
No
Check the line in question.
Yes
Is the output at pin (7) of IC3402 as specified?
No
Check IC3402 and its peripheral parts.
Yes
Check the line in question.
No Input 2 pictures come out.
Is the input at pin (1) of IC3402 as specified?
No
Check the line in question.
Yes
Is the output at pin (7) of IC3402 as specified?
No
Check IC3402 and its peripheral parts.
Yes
Is the input at pin (40) of IC801 as specified?
No
Check IC801 and its input line and peripheral parts.
Yes
Check if the adjustment process menu of the microcomputer is set properly.
No Input 3 pictures come out.
Is the input at pin (3) of IC3402 as specified?
No
Check the line in question.
Yes
Is the output at pin (7) of IC3402 as specified?
No
Check IC3402 and its peripheral parts.
Yes
Is the input at pin (40) of IC801 as specified?
No
Check IC801 and its input line and peripheral parts.
Yes
No S video pictures come out.
Are the inputs at pins (31) and (40) of IC801 as specified?
No
Check the SY line, SC line and peripheral parts of J3406.
No
Check J3406 and its peripheral parts.
No
Check IC801 and its input line and peripheral parts.
Yes
No Input 1 pictures come out.
Are the inputs at pins (15), (17), (18) and (20) of IC8701 as specified?
No
Check the input line and its peripheral parts.
Yes
Is the output of IC8701 as specified?
No
Check IC8701 and its peripheral parts.
Yes
Is the input of IC801 as specified?
No
Check IC801 and its peripheral parts.
Yes
Check the output of IC801, the input and output of IC1203 and their peripheral parts.

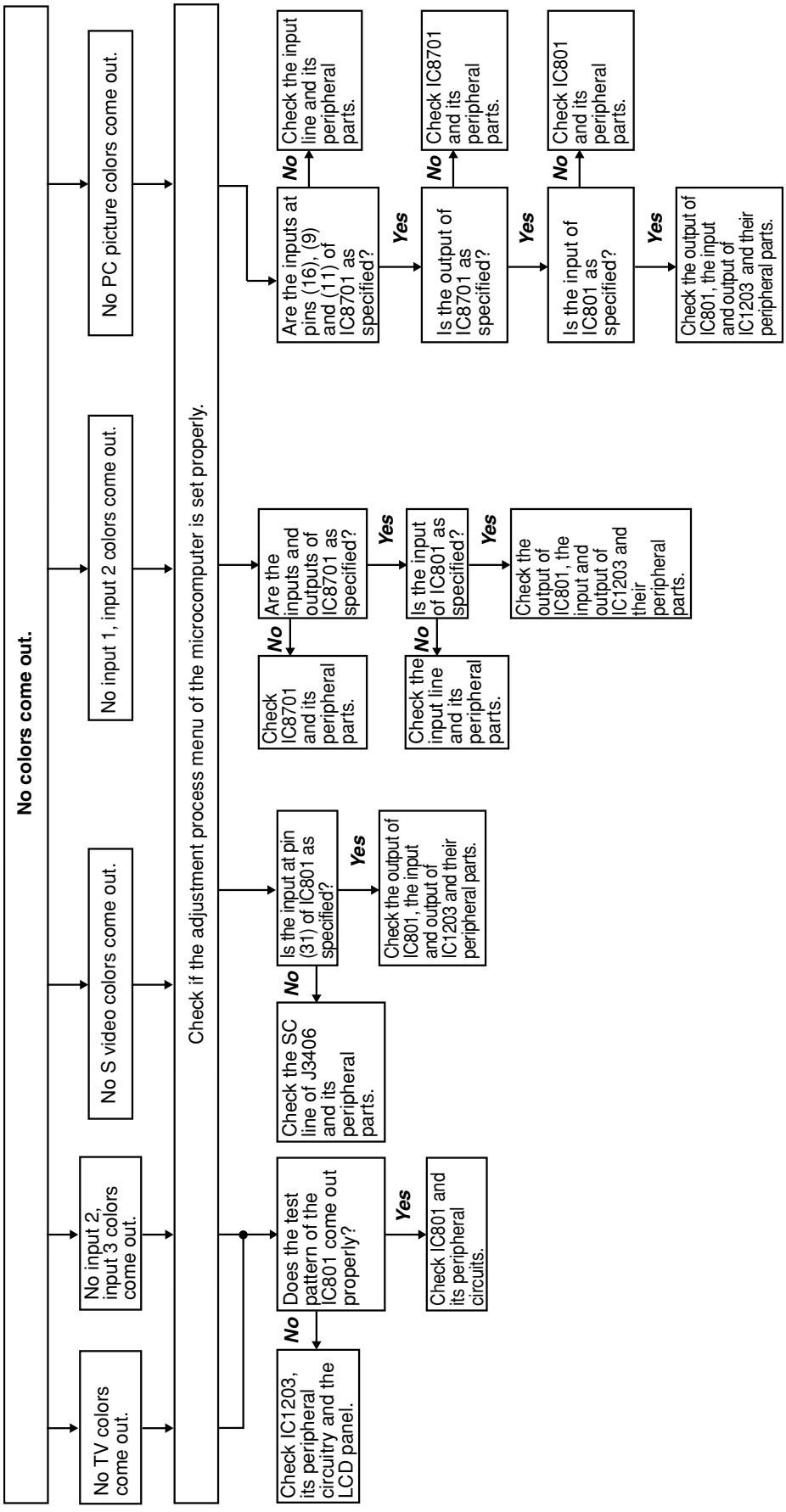
TROUBLE SHOOTING TABLE (Continued)


No pictures come out (3/3).
No HDMI pictures come out.
Is the voltage at pin (19) of SC402 as specified?
No
Check the line of pin (19) of SC402.
Yes
Are the waveform at pins (5), and (6) of IC403 as specified?
No
Check IC403 and its peripheral parts.
Yes
Are the waveform at pins (5), and (6) of IC8704 as specified?
No
Check IC8704 and its peripheral parts.
Yes
Are the waveform at input pins (108), (109), (111), (112). (114), (115), (117), (118), (124), and (125) as specified?
No
Check the each input line.
Yes
No pictures come out (2/3).
No PC pictures come out.
Check if the adjustment process menu of the microprocessor is set properly.
Are the inputs at pins (2), (3), (6), (8), (9) and (11) of IC8701 as specified?
No
Check the input line and its peripheral parts.
Yes
Is the output of IC8701 as specified?
No
Check IC8701 and its peripheral parts.
Yes
Is the input of IC801 as specified?
No
Check IC801 and its peripheral parts.
Yes
Check the output of IC801, the input and output of IC1203 and their peripheral parts.

TROUBLE SHOOTING TABLE (Continued)

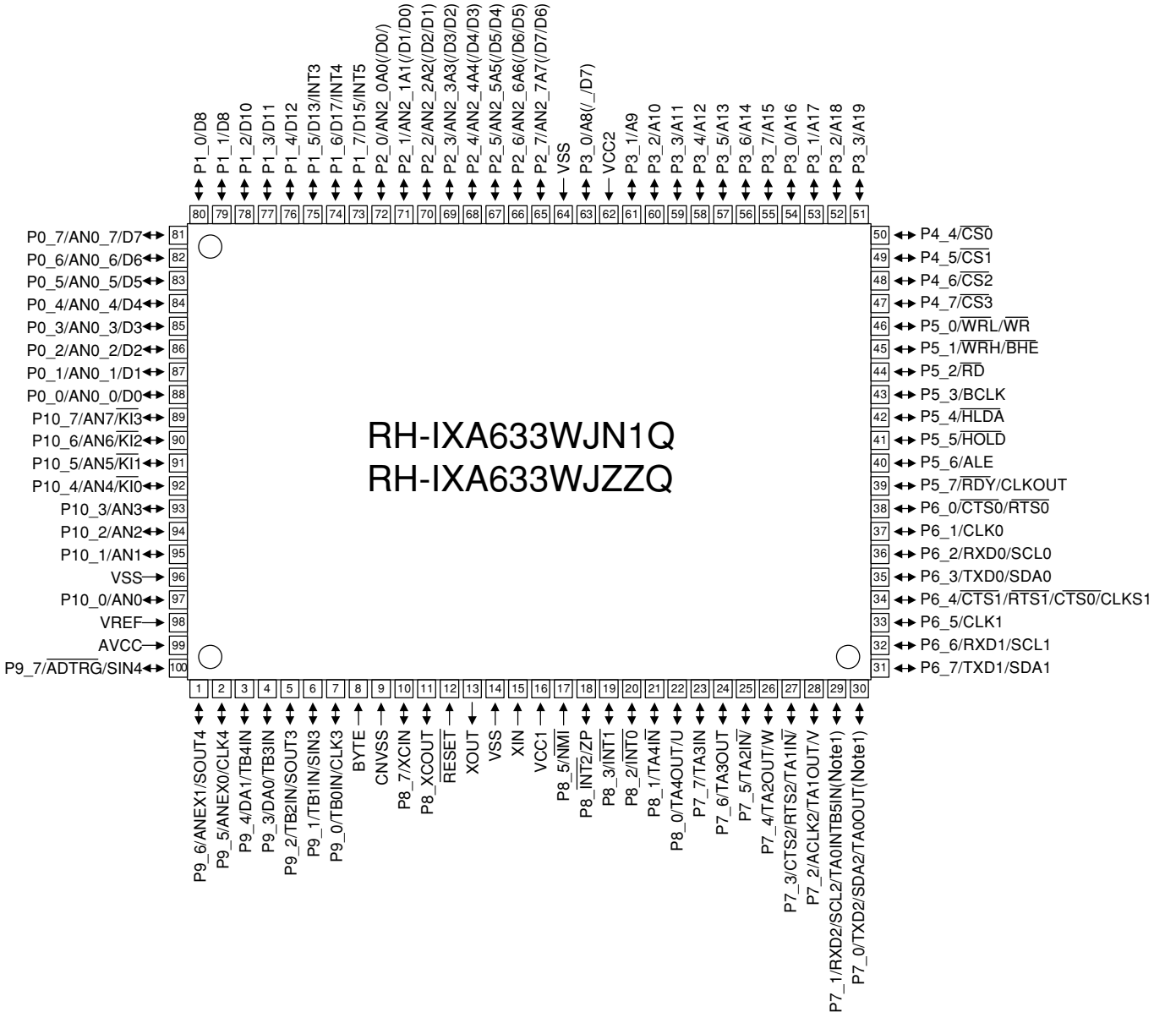

No sounds come out.
No sounds come out from the speakers.
Do all the input modes (TV, Input 1~5) fail to produce sounds?
Yes
No
Perform the following checking.
①No TV sounds come out: Check the peripheral parts of Q3411, Q3412 and the peripheral parts of TU3401.
②No input 2 sounds come out: Perform checking from J3402 to IC1301.
③No input 3 sounds come out: Perform checking from J3402 to pins (1), (13), (14) and (15) of IC3401.
④No input 1 input sounds come out: Perform checking from J3405 to pins (46) and (48) of IC3401.
⑤No HDMI sounds come out: Perform checking from SC402 to IC8701.
⑥No PC input sounds come out: Perform checking from J3406 to IC1301.
Perform the following checking.
①Is the monitor output set to "Sound Fixed" or "Sound Variable"?
②Is the sound volume level sufficient?
③Is the muting effect turned off?
④Are the headphones disconnected?
Yes
No
Do the following.
①Set the monitor output to "Sound Fixed".
②Raise the sound volume level.
③Turn off the muting effect.
④Disconnect the headphones.
Is pin (53) of IC2001 at "L"?
Yes
No
Muting effect is on. Check the SP MUTE line.
Are input and output of IC1301 as specified?
Yes
No
Check IC1301 and its peripheral parts.
Are inputs at pins (2) and (4) as well as outputs at pins (8) and (12), all of IC3301, as specified?
Yes
No
Check the line in question, IC3301 and its peripheral parts.
Check the speakers and their peripheral parts.
No sounds come out from the monitor output.
Perform the following checking.
①Do sounds come out from the speakers?
②Is the monitor output connected properly?
③Is the muting effect turned off?
Yes
No
Do the following.
①Perform checking according to the steps under "No sounds come out from the speakers".
②Connect the monitor output properly.
③Turn off the muting effect.
Is the audio signal outputted from pins (36) (Rch) and (37) (Lch) of IC1301?
Yes
No
Check the peripheral parts of IC1301.
Is pin (58) of IC2001 at "L"?
Yes
No
Perform checking from Q3403 to pin (58) of IC2001.
Is the signal of the collector of Q3403 at "L"?
Yes
No
Check Q3403, Q3401 and Q3402.
Are the inputs at pins (2) and (12) of IC3401 as specified?
Yes
No
Check the input line and its peripheral parts.
Is pin (43) of IC2001 at "L"?
Yes
No
Perform checking from Q3404 to pin (43) of IC2001.
Are the outputs at pins (14) and (15) of IC3401 as specified?
Yes
No
Check the peripheral parts of IC3401.
Check J3402 and its peripheral parts.

TROUBLE SHOOTING TABLE (Continued)


No colors come out.
No TV colors come out.
No input 2, input 3 colors come out.
No S video colors come out.
No input 1, input 2 colors come out.
No PC picture colors come out.
Check if the adjustment process menu of the microcomputer is set properly.
Check IC1203, its peripheral circuitry and the LCD panel.
No
Does the test pattern of the IC801 come out properly?
Yes
Check IC801 and its peripheral circuits.
Check the SC line of J3406 and its peripheral parts.
No
Is the input at pin (31) of IC801 as specified?
Yes
Check the output of IC801, the input and output of IC1203 and their peripheral parts.
Check IC8701 and its peripheral parts.
No
Are the inputs and outputs of IC8701 as specified?
Yes
Check the input line and its peripheral parts.
No
Is the input of IC801 as specified?
Yes
Check the output of IC801, the input and output of IC1203 and their peripheral parts.
Check the input line and its peripheral parts.
No
Are the inputs at pins (16), (9) and (11) of IC8701 as specified?
Yes
Check IC8701 and its peripheral parts.
No
Is the output of IC8701 as specified?
Yes
Check IC801 and its peripheral parts.
No
Is the input of IC801 as specified?
Yes
Check the output of IC801, the input and output of IC1203 and their peripheral parts.

MAJOR IC INFORMATION

1. IC2001 (RH-iXA633WJN1Q), (RH-iXA633WJZZQ)
   1-1.Pin Connections



Note 1: N channel open drain outputs

Pin Connections (Top View)

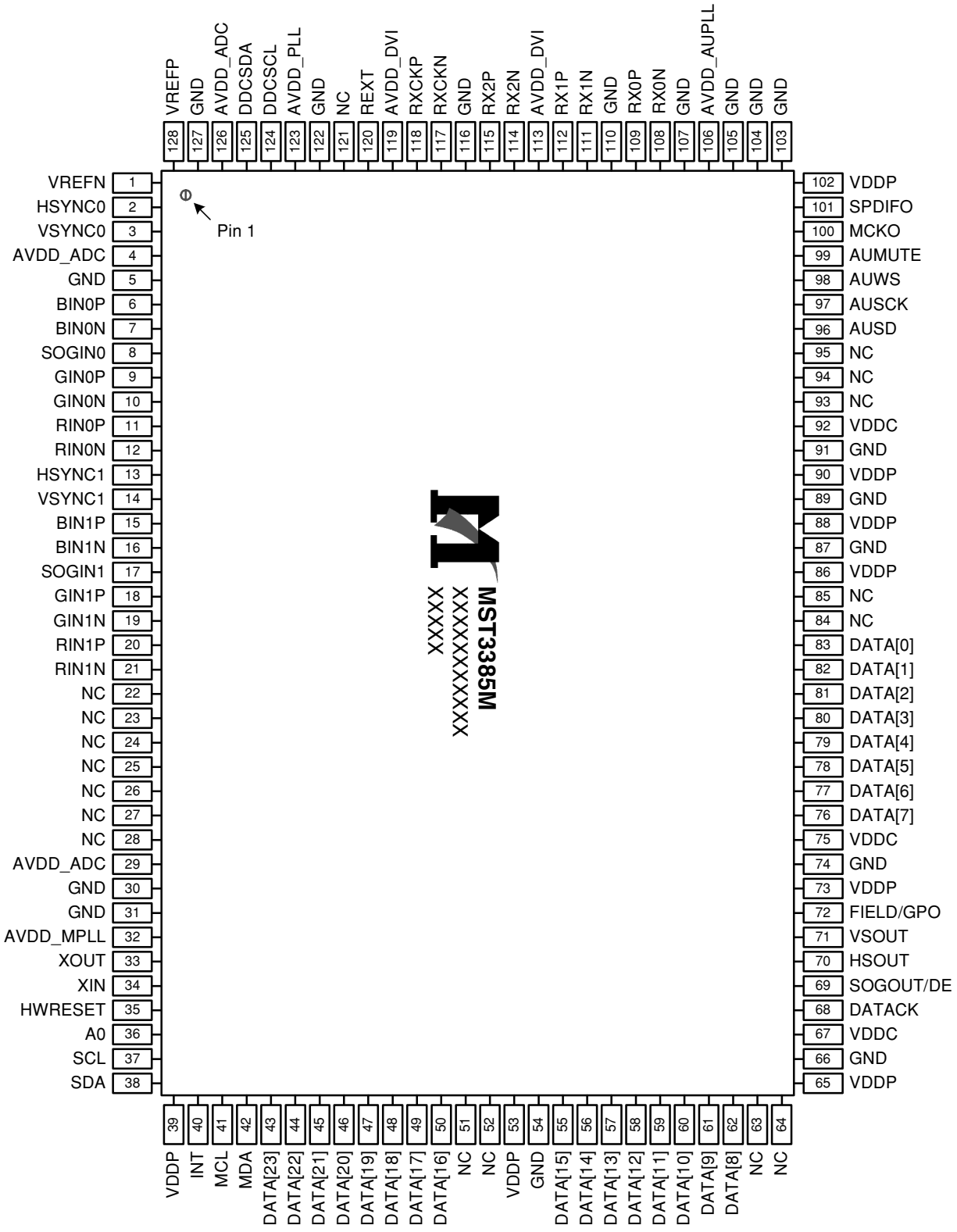
1-2. Pin Functions

Pin No.	Maker's pin name	I/O	Pin name	Function
1	P96/ANEX1/Sout4	I	AD_INT	Signal change interrupt detection
2	P95/ANEX0/CLK4	O	OFL_DUTY	Backlight dimmer duty ratio output
3	P94/DA1/TB4in	I	PC-H	PC signal HS frequency detection
4	P93/DA0/TB3in	O		
5	P92/TB2in/Sout3	I	PC-V	PC signal VS frequency detection
6	P91/TB1in/Sin3	I	CSYNC	Composite sync signal
7	P90/TB0in/CLK3	I	IREM	Remote control signal
8	BYTE	I	BYTE	Connected to GND
9	CNVss	I	CNVss	Connected to GND (connected to Vcc1 because of CNVSS at flash write)
10	P87/Xcin	I	Xcin	32-kHz crystal oscillator (for clock count)
11	P86/Xcout	O	Xcout	32-kHz crystal oscillator (for clock count)
12	RESET	I	RESET	Microprocessor reset when at "L"
13	Xout	O	Xout	System clock output
14	Vss	I	Vss	GND
15	Xin	I	Xin	System clock input
16	Vcc1	I	Vcc1	VDD (+3.3V)
17	P85/NMI	I	NMI	(Connected to Vcc1 because of NMI at flash write)
18	P84/INT2	O		
19	P83/INT1	I	PSWin	Main power monitoring
20	P82/INT0	I	VSYNC	VSYNC signal input
21	P81/TA4in	O		
22	P80/TA4out	O	AC_Ctrl	AC adaptor power consumption control
23	P77/TA3in	O	AD_RESET	MST3000 series reset output (Reset at H, Normal at L)
24	P76/TA3out	I	SSW	S terminal connected, S terminal selected at "L"
25	P75/TA2in	I/O	SCL1	Serial clock line 1 (other) in 2-line I2C bus status
26	P74/TA2out	I/O	SDA1	Serial data line 1 in 2-line I2C bus status
27	P73/CTS2_/RTS2_/TA1in	I/O	SDA2	Serial data line 2 in 2-line I2C bus status
28	P72/CLK2/TA1out	I/O	SCL2	Serial clock line 2 (EEPROM) in 2-line I2C bus status
29	P71/RxD2/SCL2/TA0in/TB5in	O		
30	P70/TxD2/SDA2/TA0out	O		
31	P67/TxD1/SDA1	I/O	TxD	Adjustment process UART device connected (TxD at flash write)
32	P66/RxD1/SCL1	I/O	RxD	Adjustment process UART device connected (RxD at flash write)
33	P65/CLK1	O	SCLK	(Clock input at flash write)
34	P64/CTS1/RTS1/CTS0/CLKS1	O	BUSY	(BUSY signal output at flash write)
35	P63/TxD0/SDA0	O	MPWEL	Data signal input (MPWEL) for 4-wire DVP serial line
36	P62/RxD0/SCL0	I	MPOE	Data signal output (MPOE) for 4-wire DVP serial line
37	P61/CLK0	O	MPWEH	Clock (MPWEH) for 4-wire DVP serial line
38	P60/CTS0/RTS0	O		
39	P57/RDY/CLKout	O	MAINSW	LED power control
40	P56/ALE	O		
41	P55/HOLD	I	POWin(EPM)	DC/DC startup detection (connected to Vss because of EPM at flash write)
42	P54/HLDA	O		
43	P53/BCLK	O	S IN/OUT	Audio input/output switching
44	P52/RD	I	DVP15_IN	DVP1.5V power detection
45	P51/WRH/BHE	O	RLED	Red power LED control
46	P50/WRL/WR	I	MRDY(CE)	I2C bus open/closed switching detection (connected to Vcc2 because of CE at flash write)
47	P47/CS3	O	GLED	Green power LED control
48	P46/CS2	O		
49	P45/CS1	O	DVP33_CTRL	DVP3.3V power control
50	P44/CS0	O	WPCONT	HDMI EDID write protect control

Pin No.	Maker's pin name	I/O	Pin name	Function
51	P43/A19	O		
52	P42/A18	O	HPMUTE	Headphones mute
53	P41/A17	O	SP MUTE1	Main speakers mute
54	P40/A16	O		
55	P37/A15	I	HP DET	Headphones detection
56	P36/A14	O	SSTBY	Amplifier power control (1-bit-less model)
57	P35/A13	I	HPD	HDMI connect detection
58	P34/A12	O	LMUTE	Line-out audio mute
59	P33/A11	O	V IN/OUT	Video input/output switching
60	P32/A10	O	SRESET	Audio-related IC reset output
61	P31/A9	O		
62	Vcc2	I	Vcc2	Power input
63	P30/A8	O	TCON_OUT_CTL	DVP control output control
64	Vss	I	Vss	GND
65	P27/AN27/A7	O	V_SEL	AV select switch
66	P26/AN26/A6	O	TV_SEL	AV select switch
67	P25/AN25/A5	O	BUS SELECT H	DVP I2C/4-wire communication system switching (H: I2C control, L: Serial connection)
68	P24/AN24/A4	O	MPCE	DVP 4-wire serial chip enable (MPCE)/DVP slave address switching
69	P23/AN23/A3	O	OPC_LED	OPC LED light-up
70	P22/AN22/A2	O	INV_POW	Inverter power control
71	P21/AN21/A1	O	AD33_CONT	ADC3.3V power control
72	P20/AN20/A0	O	POWout	DC/DC control output
73	P17/D15/INT5	I	ADPPOW	Adaptor ON/OFF input
74	P16/D14/INT4	O	HPD_CTL	HDMI terminal Hot Plug control
75	P15/D13/INT3	O		
76	P14/D12	O	TMP1	Temperature data output 1
77	P13/D11	O		
78	P12/D10	O	TMP2	Temperature data output 2
79	P11/D9	O	TMP3	Temperature data output 3
80	P10/D8	O	DDC_RESET	Video-related IC reset output (Renesas DVP)
81	P07/AN07/D7	I	KEY4	Key input 4
82	P06/AN06/D6	I	KEY5	Key input 5
83	P05/AN05/D5	O		
84	P04/AN04/D4	O		
85	P03/AN03/D3	O		
86	P02/AN02/D2	O	SHORT_DET	Over-current protect detection
87	P01/AN01/D1	O		
88	P00/AN00/D0	O		
89	P107/AN7/KI3	I	AFT	AFT voltage input
90	P106/AN6/KI2	O		
91	P105/AN5/KI1	I	KEY1	Key input 1
92	P104/AN4/KI0	I	KEY2	Key input 2
93	P103/AN3	O		
94	P102/AN2	I	OPC_IN	OPC sensor level input
95	P101/AN1	O		
96	AVss	I	AVss	Connected to GND
97	P100/AN0	O		
98	VREF	I	VREF	Connected to +3.3V
99	AVcc	I	AVcc	Connected to +3.3V
100	P97/ADtrg/Sin4	O		

2. IC8701(VHIMST3385M-1Q)

2-1. Pin Connections



Pin Connections (Top View)

2-2. Pin Functions

CPU Interface

Pin Name	Pin Type	Function	Pin
HWRESET	Schmitt Trigger Input w/ 5V-tolerant	Hardware Reset; Active High	35
A0	Input w/ 5V-tolerant	Serial Interface Address Input	36
SCL	Input w/ 5V-tolerant	2-Wire Serial Bus Clock Input	37
SDA	I/O w/ 5V-tolerant	2-Wire Serial Bus Data I/O	38
INT	Output w/ Pull-Down Resistor	CPU Interrupt Programmable By User	40

Analog Interface

Pin Name	Pin Type	Function	Pin
VREFP		Positive Internal Reference Voltage Bypass for ADC	128
VREFN		Negative Internal Reference Voltage Bypass for ADC	1
HSYNC0	Schmitt Trigger Input w/ 5V-tolerant	Horizontal SYNC Input for 1st Analog Interface	2
VSYNC0	Schmitt Trigger Input w/ 5V-tolerant	Vertical SYNC Input for 1st Analog Interface	3
BIN0P	Analog Input	Blue Input for 1st Analog Interface	6
BIN0N	Analog Input	Blue Input Reference Ground for 1st Analog Interface	7
SOGIN0	Analog Input	Sync-on-Green Input for 1st Analog Interface	8
GIN0P	Analog Input	Green Input for 1st Analog Interface	9
GIN0N	Analog Input	Green Input Reference Ground for 1st Analog Interface	10
RIN0P	Analog Input	Red Input for 1st Interface	11
RIN0N	Analog Input	Red Input Reference Ground for 1st Analog Interface	12
HSYNC1	Schmitt Trigger Input w/ 5V-tolerant	Horizontal SYNC Input for 2nd Analog Interface	13
VSYNC1	Schmitt Trigger Input w/ 5V-tolerant	Vertical SYNC Input for 2nd Analog Interface	14
BIN1P	Analog Input	Blue Input for 2nd Analog Interface	15
BIN1N	Analog Input	Blue Input Reference Ground for 2nd Analog Interface	16
SOGIN1	Analog Input	Sync-on-Green Input for 2nd Analog Interface	17
GIN1P	Analog Input	Green Input for 2nd Analog Interface	18
GIN1N	Analog Input	Green Input Reference Ground for 2nd Analog Interface	19
RIN1P	Analog Input	Red Input for 2nd Analog Interface	20
RIN1N	Analog Input	Red Input Reference Ground for 2nd Analog Interface	21

DVI/HDMI Interface

Pin Name	Pin Type	Function	Pin
RX0N	DVI/HDMI Input	Negative DVI/HDMI Input for Data Channel 0	108
RX0P	DVI/HDMI Input	Positive DVI/HDMI Input for Data Channel 0	109
RX1N	DVI/HDMI Input	Negative DVI/HDMI Input for Data Channel 1	111
RX1P	DVI/HDMI Input	Positive DVI/HDMI Input for Data Channel 1	112
RX2N	DVI/HDMI Input	Negative DVI/HDMI Input for Data Channel 2	114
RX2P	DVI/HDMI Input	Positive DVI/HDMI Input for Data Channel 2	115
RXCKN	DVI/HDMI Input	Negative DVI/HDMI Input for Clock Channel	117
RXCKP	DVI/HDMI Input	Positive DVI/HDMI Input for Clock Channel	118

Misc. Interface

Pin Name	Pin Type	Function	Pin
XOUT		Crystal Oscillator Output	33
XIN		Crystal Oscillator Input	34
MCL	Output w/ 5V-tolerant	HDCP Master Serial Bus Clock	41
MDA	I/O w/ 5V-tolerant	HDCP Master Serial Bus Data I/O	42
REXT		External Resistor 390 Ohm connected to AVDD_DVI	120
DDCSCL	Input w/ 5V-tolerant	HDCP Slave Serial Bus Clock Input for DVI/HDMI	124
DDCSDA	I/O w/ 5V-tolerant	HDCP Slave Serial Bus Data I/O for DVI/HDMI	125

Output Interface

Pin Name	Pin Type	Function	Pin
DATA[23:0]**Note**	Output w/ Pull-Down Resistor	Data Output Bit [23:0];4~12 mA Driving Strength Programmable by User	43-50, 55-62, 76-83
DATACK	Output w/ Pull-Down Resistor	Clock Output A; 4~12 mA Driving Strength Programmable by User	68
SOGOUT/DE	Output w/ Pull-Down Resistor	Sync-on-Green Slicer Output for Analog Interface/ Data Enable Output for DVI/HDMI Interface; 4~12 mA Driving Strength Programmable by User	69
HSOUT	Output w/ Pull-Down Resistor	HSYNC Output; 4~12 mA Driving Strength Programmable by User	70
VSOUT	Output w/ Pull-Down Resistor	VSYNC Output; 4~12 mA Driving Strength Programmable by User	71
IELD/GPO	Output w/ Pull-Down Resistor	Frame Indication output During Interlace Input/ General Purpose output Programmable by User	72

Note: Please refer to Output Format Table at the end of this section for details.

Audio Output Interface

Pin Name	Pin Type	Function	Pin
AUSD	Output w/ Pull-Down Resistor	Audio Serial Data Output Bit; 4~12 mA Driving Strength Programmable by User	96
AUSCK	Output w/ Pull-Down Resistor	Audio Serial Clock Output; 4~12 mA Driving Strength Programmable by User	97
AUWS	Output w/ Pull-Down Resistor	Audio Serial Word Select Output; 4~12 mA Driving Strength Programmable by User	98
AUMUTE	Output w/ Pull-Down Resistor	Audio Output Mute Control	99
MCKO	Output w/ pull-Down Resistor	Audio Master Clock Output	100
SPDIFO	Output w/ Pull-Down Resistor	Audio SPDIF Output; 4~12 mA Driving Strength Programmable by User	101

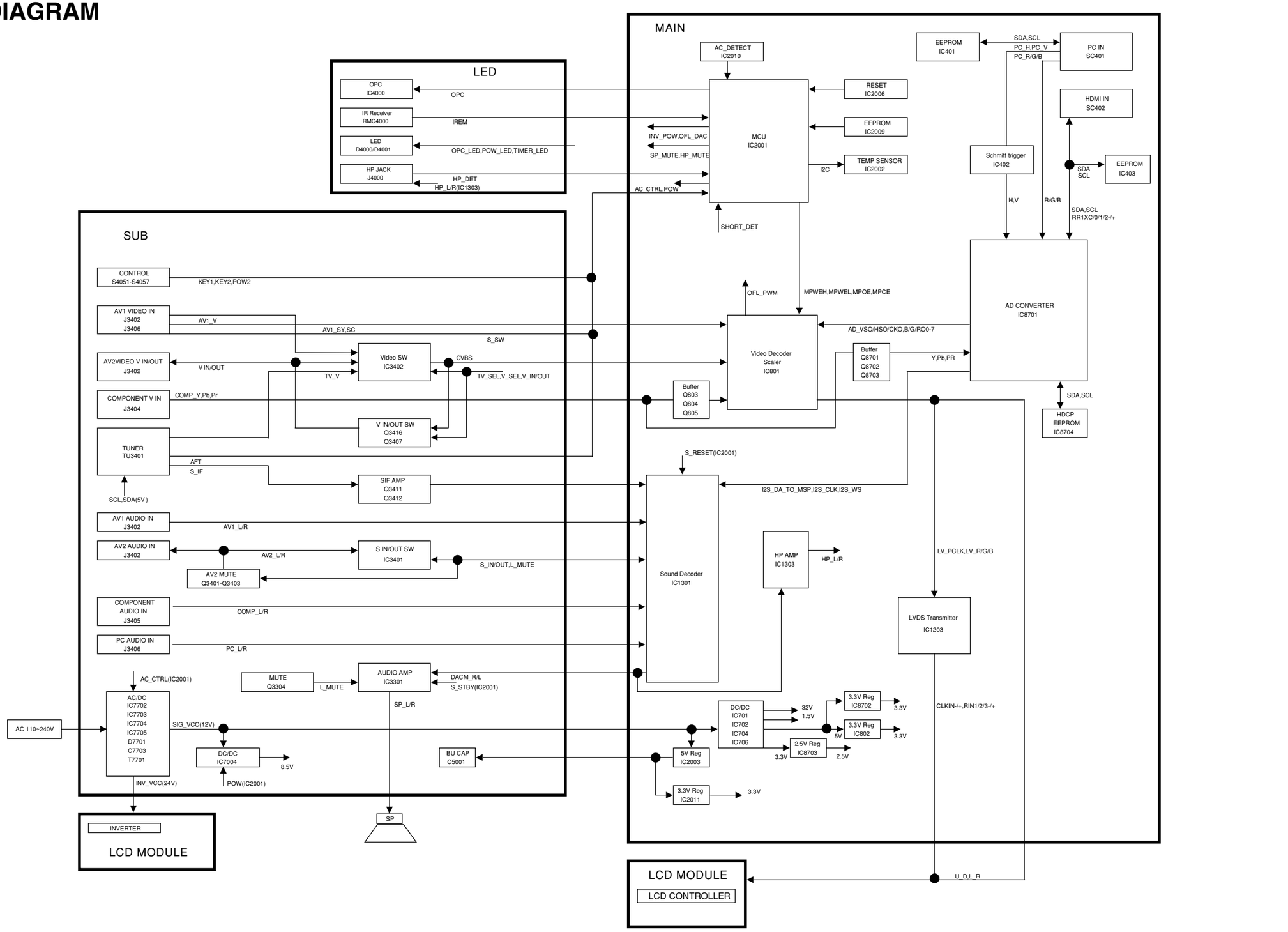
Power pins

Pin Name	Pin Type	Function	Pin
AVDD_ADC	3.3V Power	ADC Power Supply	4, 29, 126
AVDD_DVI	3.3V Power	DVI Power Supply	113, 119
AVDD_MPLL	3.3V Power	Master PLL Power Supply	32
AVDD_AUPLL	2.5V Power	Audio PLL Power Supply	106
AVDD_PLL	3.3V Power	PLL Power Supply	123
VDDP	3.3V Power	Digital output Power Supply	39, 53, 65, 73, 86, 88, 90, 102
VDDC	2.5V Power	Digital Core Power Supply	67, 75, 92
GND	Ground	System Ground	5, 30, 31, 54, 66, 74, 87, 89, 91,103-105, 107, 110, 116, 122, 127

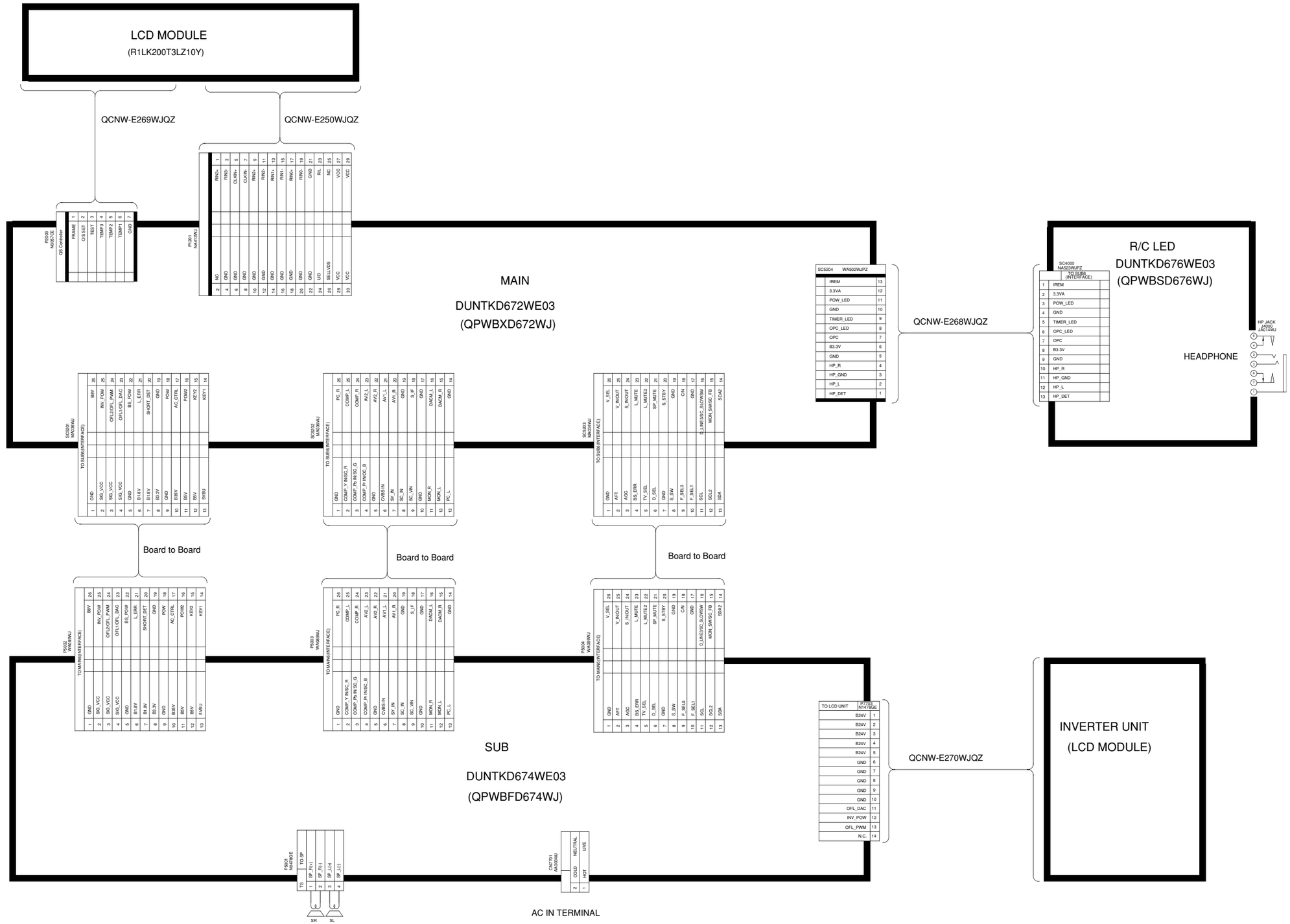
No Connects

Pin Name	Pin Type	Function	Pin
NC		No connects	22-28, 51, 52, 63, 64, 84, 85, 93-95, 121

BLOCK DIAGRAM



OVERALL WIRING DIAGRAM



DESCRIPTION OF SCHEMATIC DIAGRAM

VOLTAGE MEASUREMENT CONDITION:

1. The voltages at test points are measured on the stable supply voltage of AC 120V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. The unit of resistance "Ω" is omitted. (K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted. (K= ± 10%, F= ± 1%, D= ± 0.5%)
3. All resistors are 1/16W, unless otherwise noted.

CAPACITOR

1. All capacitors are μF, unless otherwise noted. (P=pF=μμF).
2. All capacitors are 50V, unless otherwise noted.

CAUTION:
This circuit diagram is original one, therefore there may be a slight difference from yours.

SAFETY NOTES:

1.DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2.SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

IMPORTANT SAFETY NOTICE:

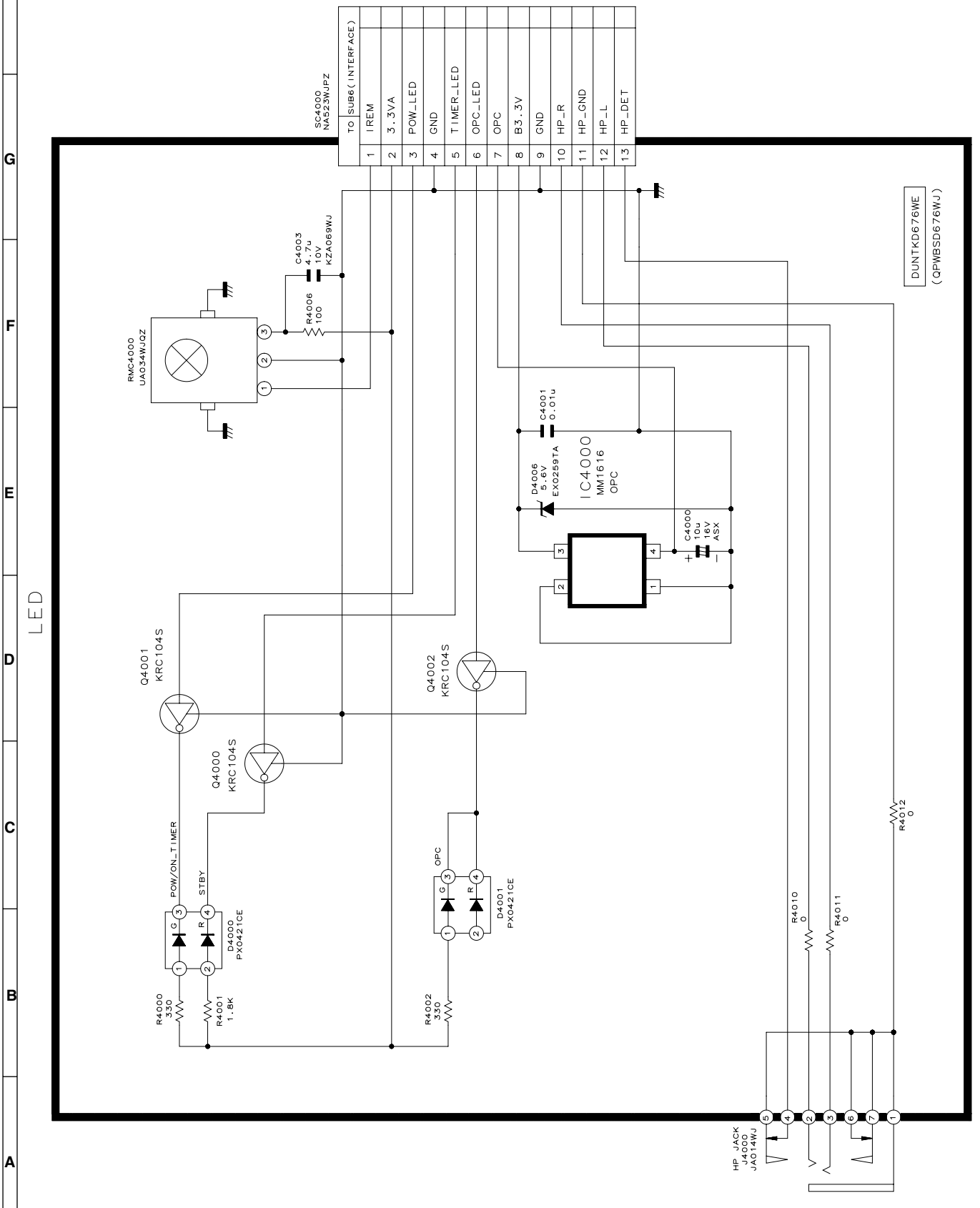
PARTS MARKED WITH "⚠" ( ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

AVIS DE SECURITE IMPORTANT:

LES PIECES MARQUEES "⚠" ( )SONT IMPORTANTES POUR MAINTENIR LA SECURITE DE L'APPAREIL.
NE REMPLACER CES PIEDES QUE PAR DES PIECES DONT LE NUMERO EST SPECIFIE POUR MAINTENIR LA SECURITE ET PROTEGER LE BON FONCTIONNEMENT DE L'APPAREIL.

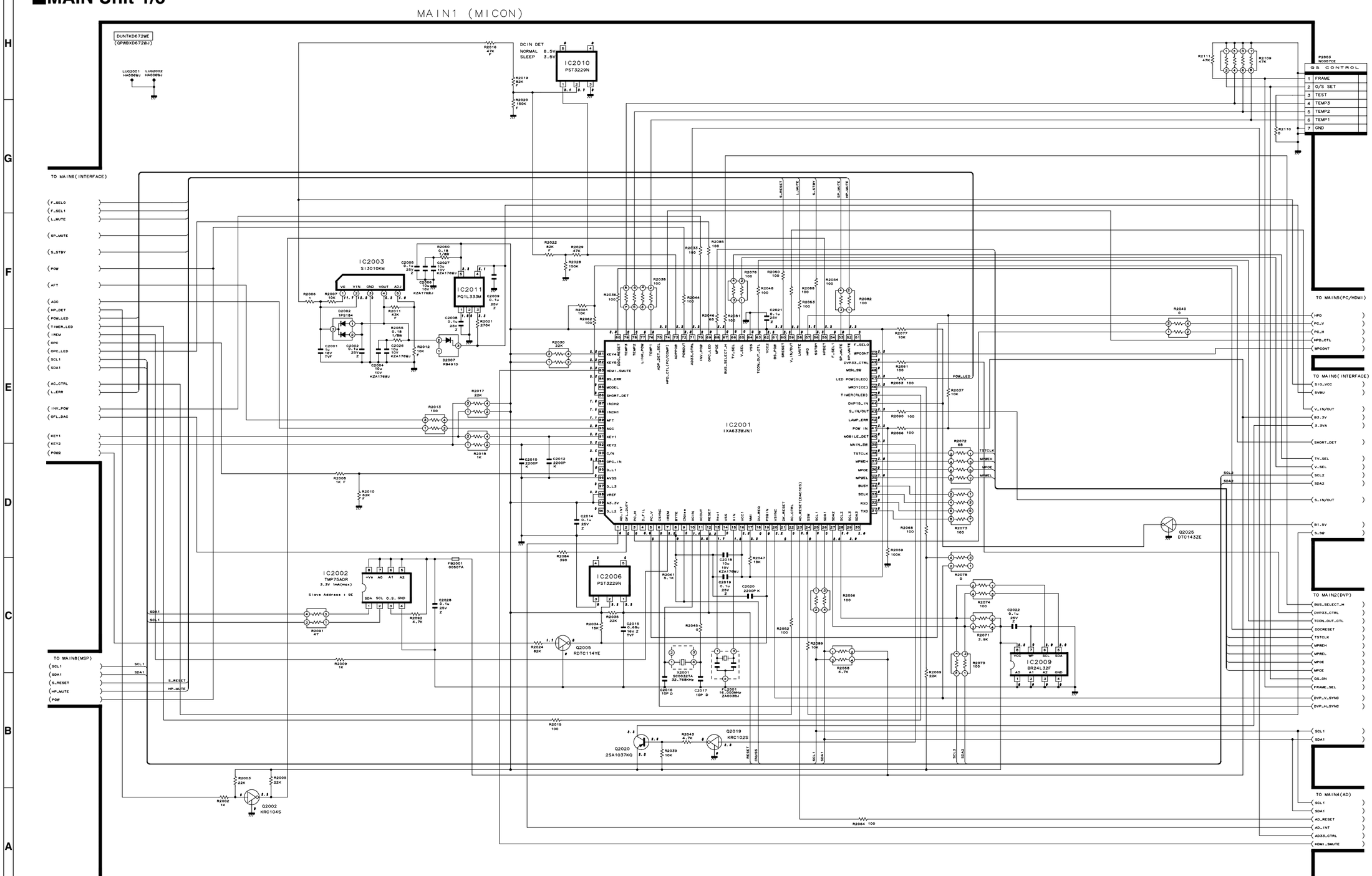
SCHEMATIC DIAGRAM

■ R/C, LED Unit



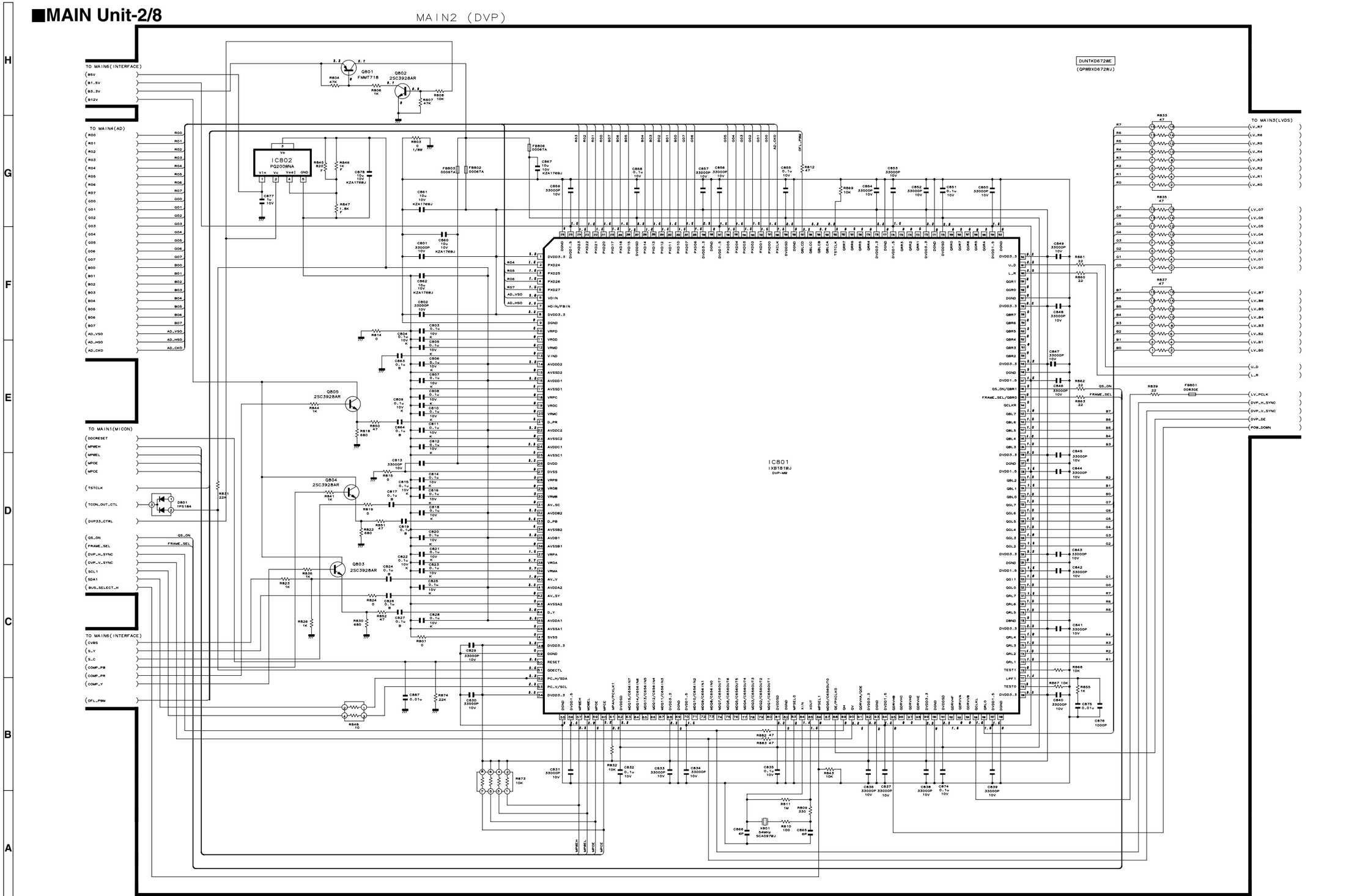
■MAIN Unit-1/8

MAIN1 (MICON)

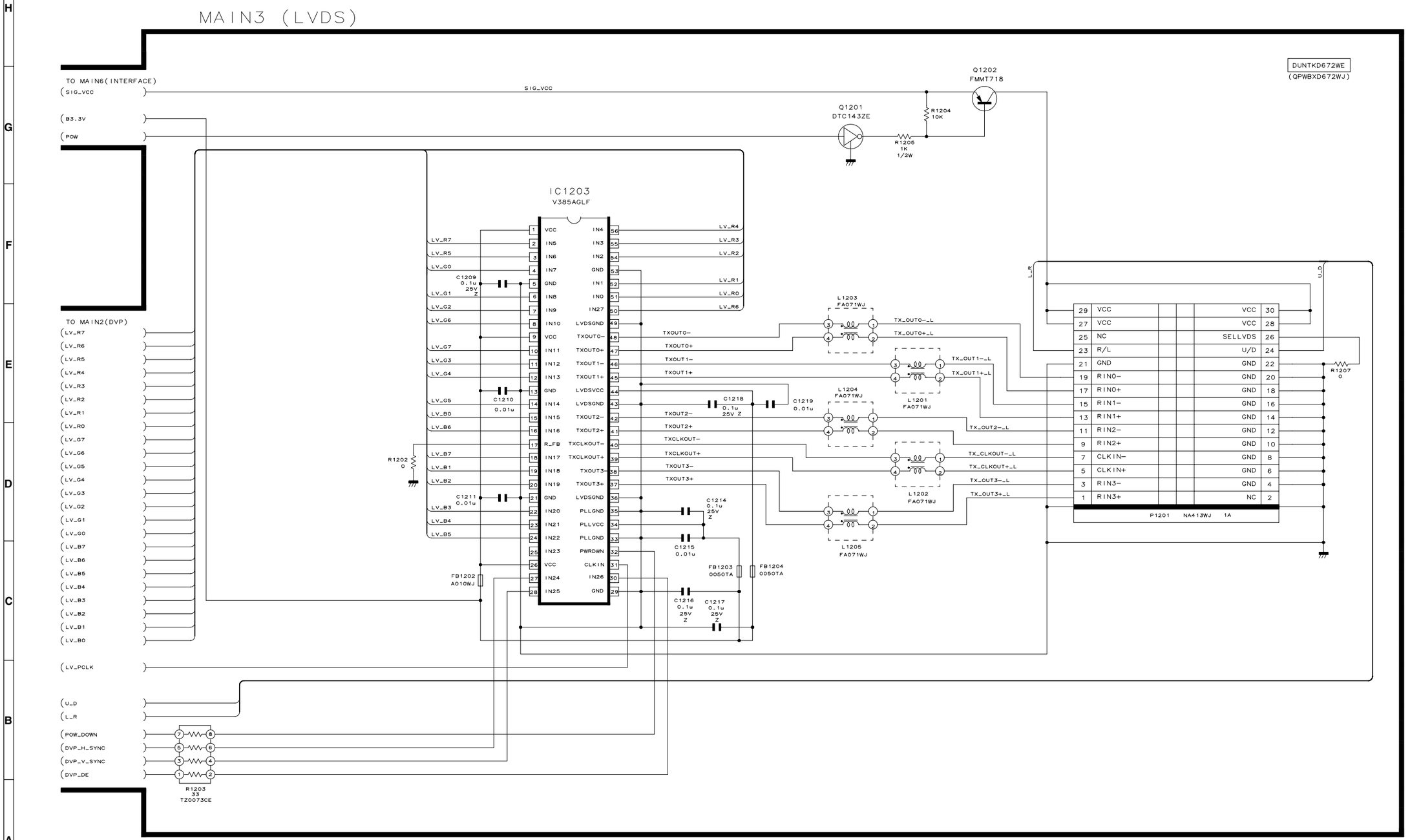


■MAIN Unit-2/8

MAIN2 (DVP)

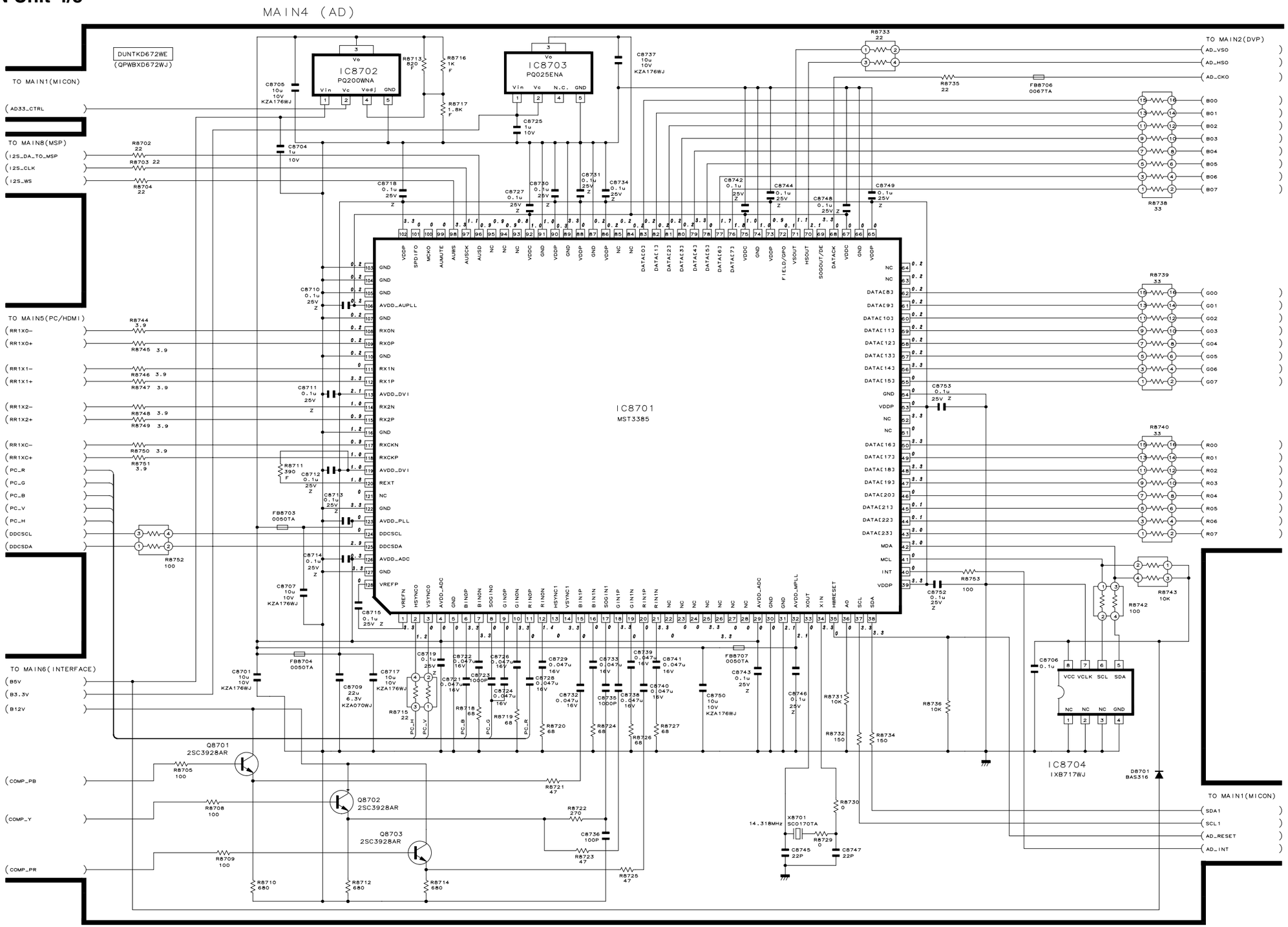


■MAIN Unit-3/8



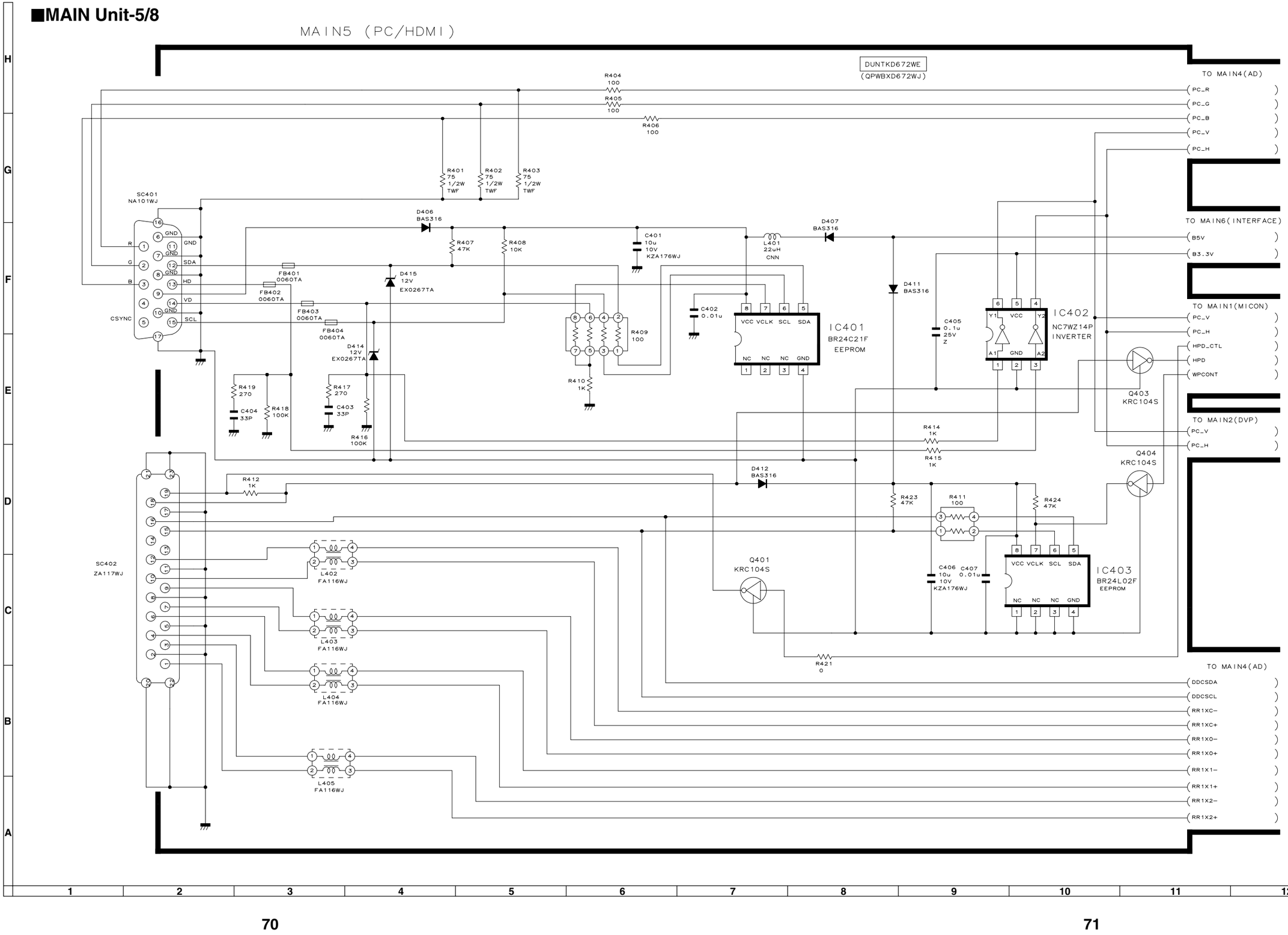
1	2	3	4	5	6	7	8	9	10	11	12	

■MAIN Unit-4/8

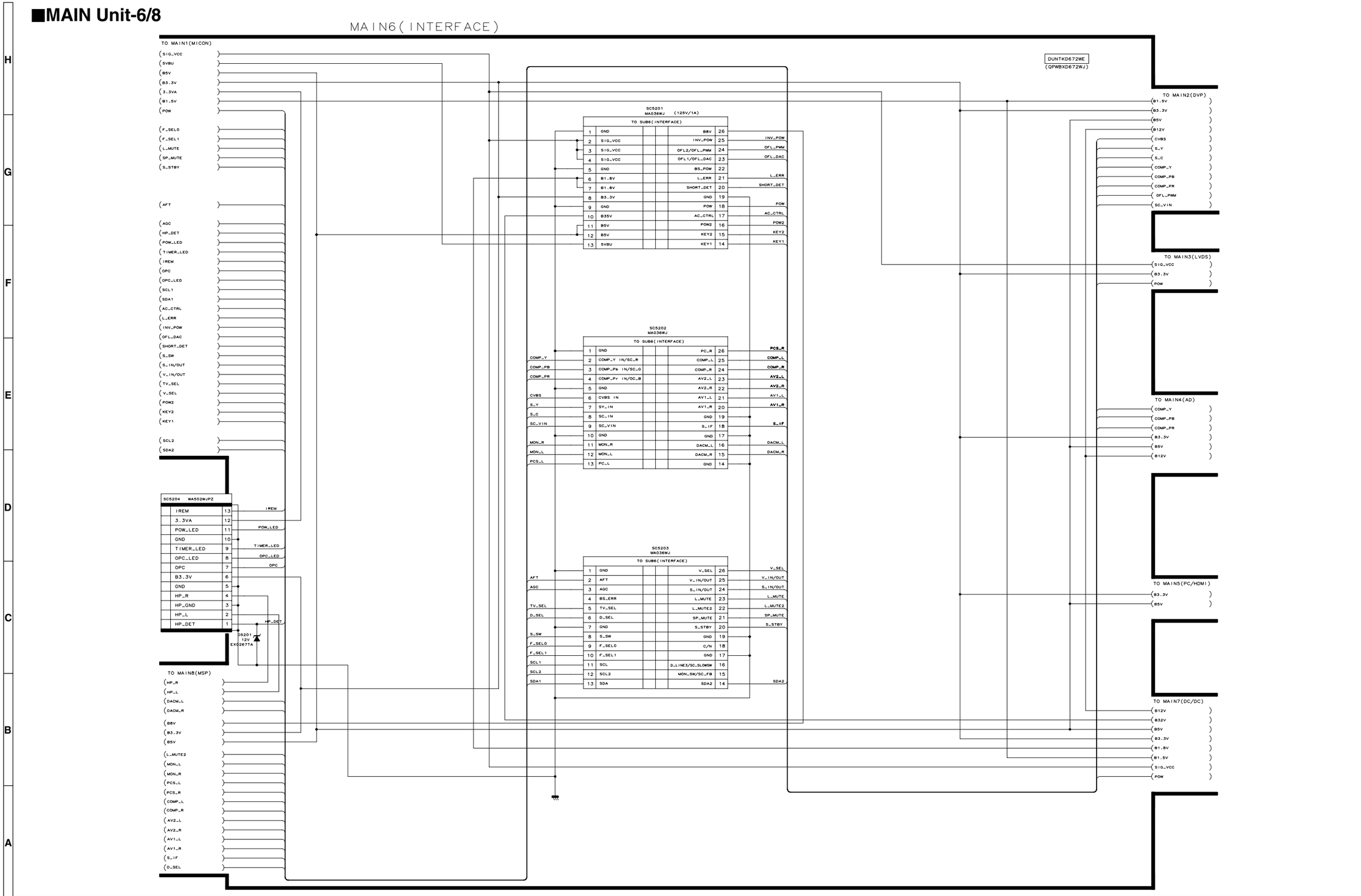

MAIN4 (AD)
DUNTKD672WE
(QPWBXD672WJ)
TO MAIN1(MICON)
AD33_CTRL
TO MAIN8(MSP)
I2S_DA_TO_MSP
I2S_CLK
I2S_WS
TO MAIN5(PC/HDMI)
RR1X0-
RR1X0+
RR1X1-
RR1X1+
RR1X2-
RR1X2+
RR1XC-
RR1XC+
PC_R
PC_G
PC_B
PC_V
PC_H
DDCSCL
DDCSDA
TO MAIN6(INTERFACE)
B5V
B3.3V
B12V
COMP_PB
COMP_Y
COMP_PR
IC8702
PQ200WNA
IC8703
PQ025ENA
IC8701
MST3385
IC8704
IXB717WJ
Q8701
2SC3928AR
Q8702
2SC3928AR
Q8703
2SC3928AR
D8701
BAS316
X8701
14.318MHz SCD170TA
TO MAIN2(DVP)
AD_VSO
AD_HSO
AD_CKO
TO MAIN1(MICON)
SDA1
SCL1
AD_RESET
AD_INT
B00
B01
B02
B03
B04
B05
B06
B07
G00
G01
G02
G03
G04
G05
G06
G07
R00
R01
R02
R03
R04
R05
R06
R07
VDDP
SPDIFO
MCKO
AUMUTE
AUWS
AUSCK
AUSD
VDDC
GND
DATACK
HSOUT
VSOUT
FIELD/GPO
SOGOUT/DE
AVDD_AUPLL
RX0N
RX0P
RX1N
RX1P
AVDD_DVI
RX2N
RX2P
RXCKN
RXCKP
REXT
AVDD_PLL
DDCSCL
DDCSDA
AVDD_ADC
VREFP
VREFN
HSYNC0
VSYNC0
BINDP
BINDN
SOG1N0
GINDP
GINDN
RINDP
RINDN
HSYNC1
VSYNC1
BINP
BINN
SOG1N1
GINP
GINN
RINP
RINN
AVDD_MPLL
XOUT
XIN
HMRESET
A0
SCL
SDA
VCC VCLK SCL SDA
NC NC NC GND

■MAIN Unit-5/8

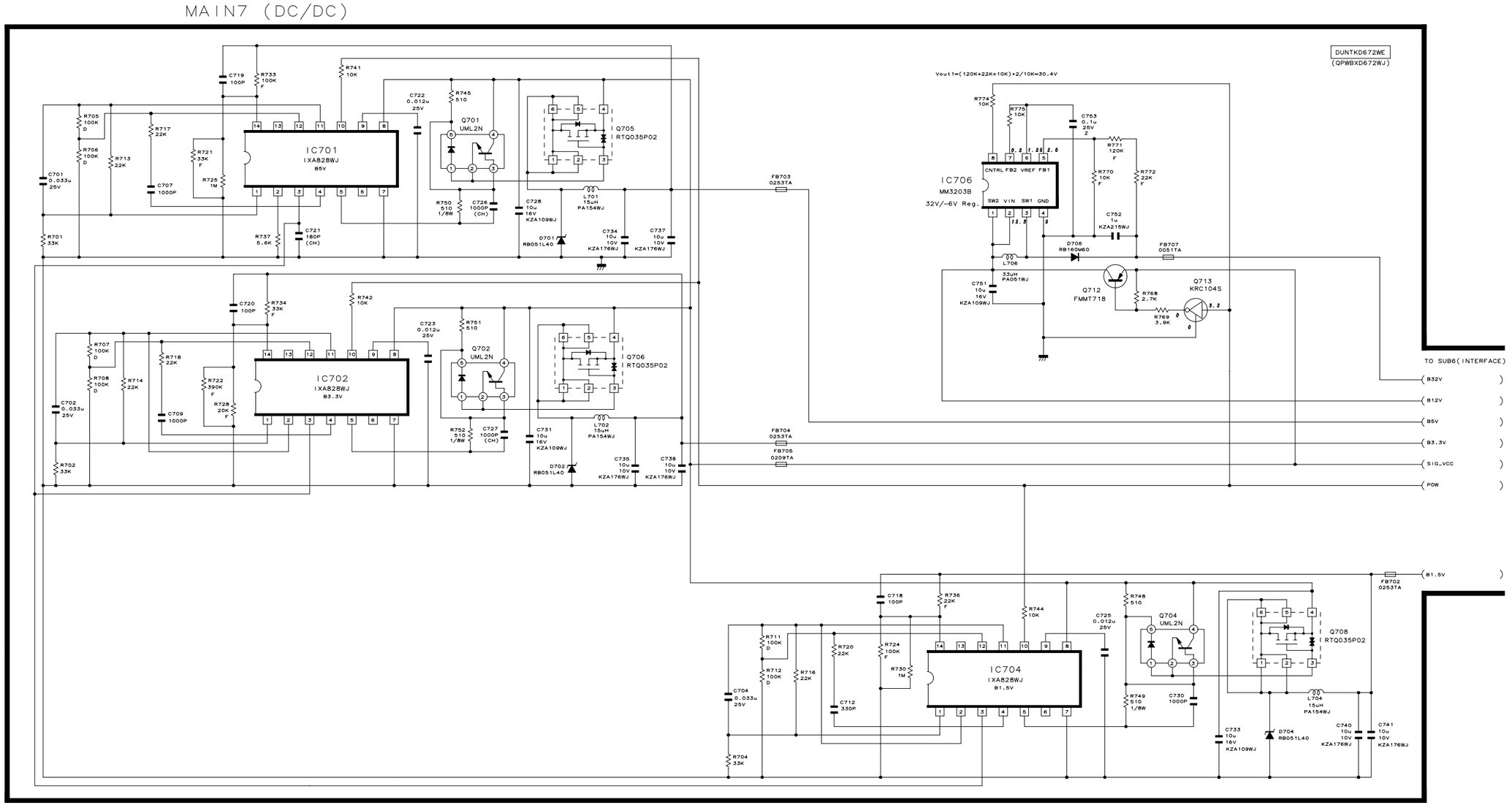
MAIN5 (PC/HDMI)



■MAIN Unit-6/8

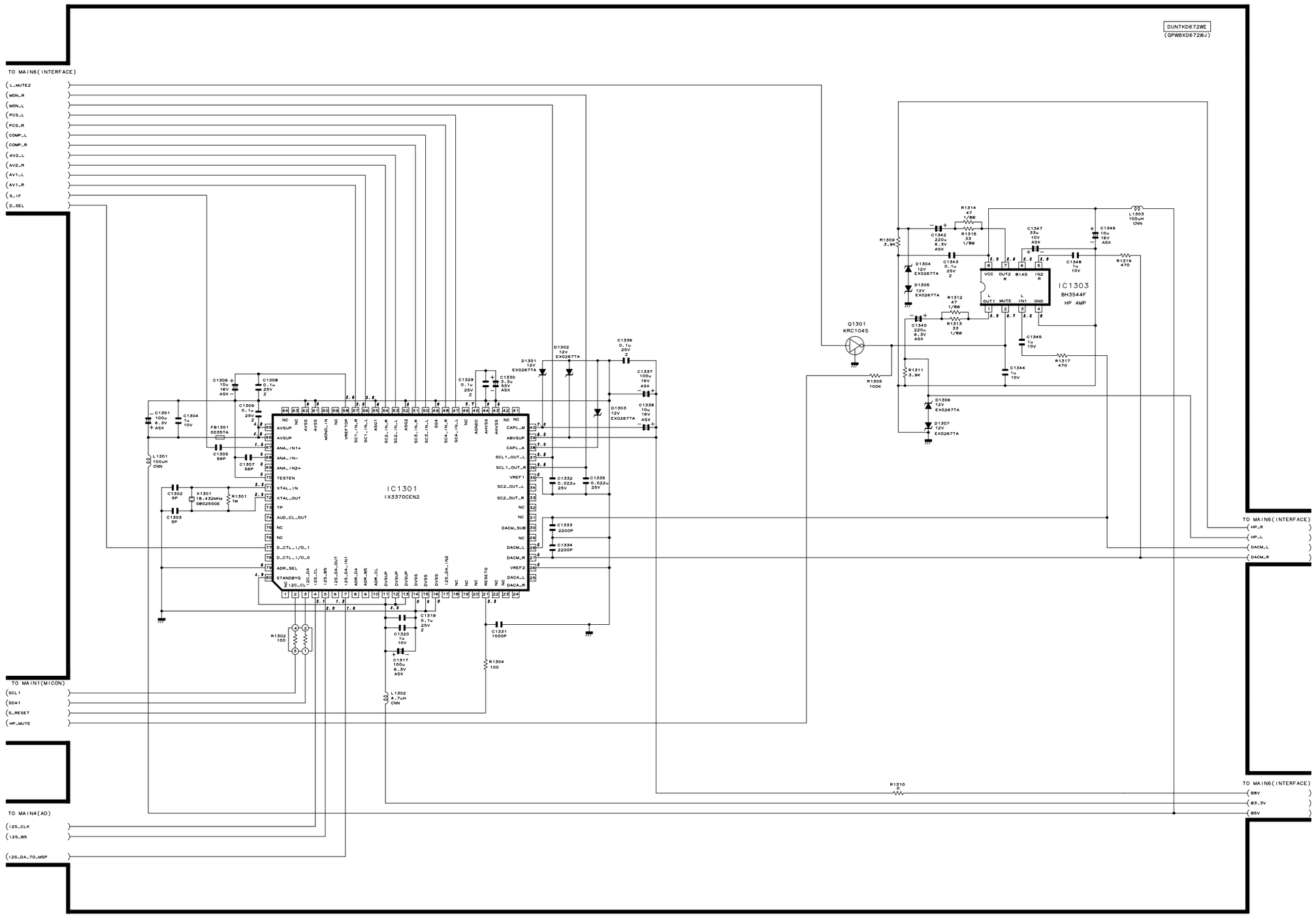

MAIN6(INTERFACE)
TO MAIN1(MICON)
SIG_VCC
5VBU
B5V
B3.3V
3.3VA
B1.5V
POW
F_SEL0
F_SEL1
L_MUTE
SP_MUTE
S_STBY
AFT
AGC
HP_DET
POW_LED
TIMER_LED
IREM
OPC
OPC_LED
SCL1
SDA1
AC_CTRL
L_ERR
INV_POW
OFL_DAC
SHORT_DET
S_SW
S_IN/OUT
V_IN/OUT
TV_SEL
V_SEL
POW2
KEY2
KEY1
SCL2
SDA2
SC5201
MA036WJ (125V/1A)
TO SUB6(INTERFACE)
SC5202
MA036WJ
TO SUB6(INTERFACE)
SC5203
MA036WJ
TO SUB6(INTERFACE)
SC5204 WA502WJPZ
D5201
12V
EXD2677A
TO MAIN8(MSP)
HP_R
HP_L
DACM_L
DACM_R
B8V
B3.3V
B5V
L_MUTE2
MON_L
MON_R
PCS_L
PCS_R
COMP_L
COMP_R
AV2_L
AV2_R
AV1_L
AV1_R
S_IF
D_SEL
DUNTKD672WE
(QPWBXD672WJ)
TO MAIN2(DVP)
B1.5V
B3.3V
B5V
B12V
CVBS
S_Y
S_C
COMP_Y
COMP_PB
COMP_PR
OFL_PWM
SC_VIN
TO MAIN3(LVDS)
SIG_VCC
B3.3V
POW
TO MAIN4(AD)
COMP_Y
COMP_PB
COMP_PR
B3.3V
B5V
B12V
TO MAIN5(PC/HDMI)
B3.3V
B5V
TO MAIN7(DC/DC)
B12V
B32V
B5V
B3.3V
B1.8V
B1.5V
SIG_VCC
POW

■MAIN Unit-7/8


MAIN7 (DC/DC)
DUNTKD672WE
(QPWBXD672WJ)
IC701
IXA828WJ
B5V
IC702
IXA828WJ
B3.3V
IC704
IXA828WJ
B1.5V
IC706
MM3203B
32V/-6V Reg.
Vout=(120K+22K+10K)÷2/10K=30.4V
Q701
UML2N
Q702
UML2N
Q704
UML2N
Q705
RTQ035P02
Q706
RTQ035P02
Q708
RTQ035P02
Q712
FMMT718
Q713
KRC104S
D701
RB051L40
D702
RB051L40
D704
RB051L40
D706
RB160M60
L701
15uH
PA154WJ
L702
15uH
PA154WJ
L704
15uH
PA154WJ
L706
33uH
PA051WJ
FB703
0253TA
FB704
0253TA
FB705
0209TA
FB707
0051TA
FB702
0253TA
TO SUB6(INTERFACE)
B32V
B12V
B5V
B3.3V
SIG_VCC
POW
B1.5V

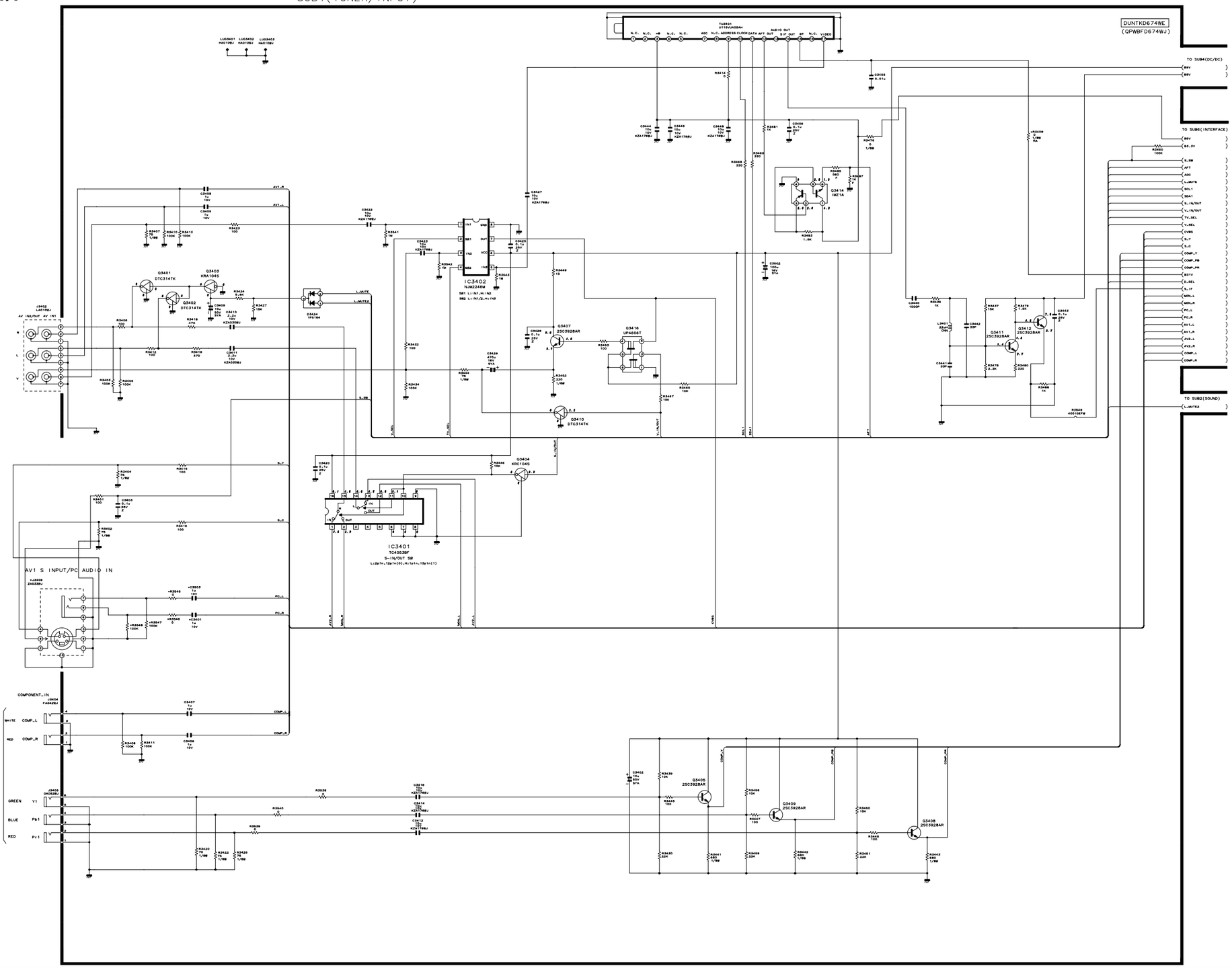
■MAIN Unit-8/8

MAIN8(MSP)

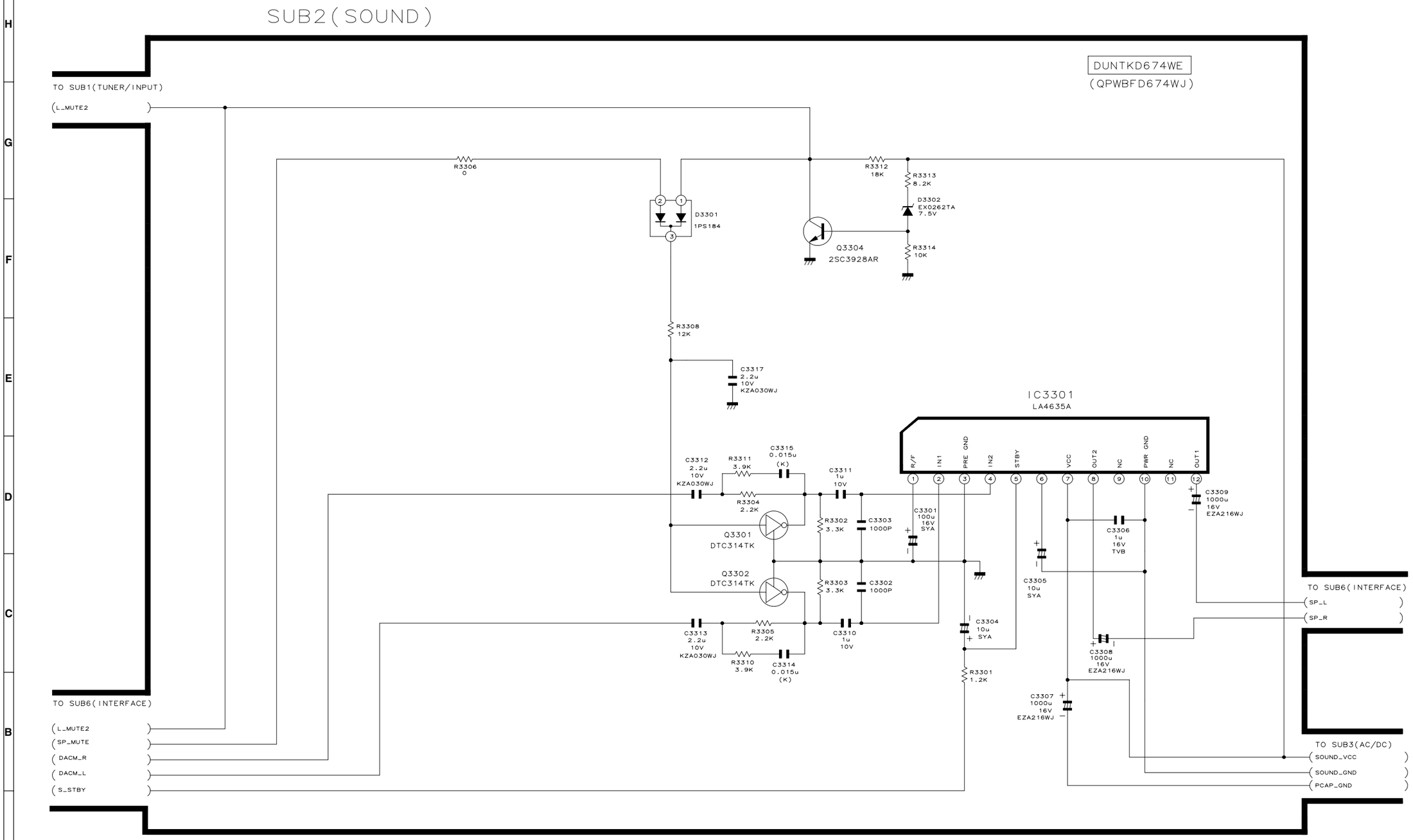


■SUB Unit-1/7

SUB1(TUNER/INPUT)



■SUB Unit-2/7


SUB2(SOUND)
DUNTKD674WE
(QPWBFD674WJ)
TO SUB1(TUNER/INPUT)
L_MUTE2
R3306 0
D3301 1PS184
R3312 18K
R3313 8.2K
D3302 EX0262TA 7.5V
Q3304 2SC3928AR
R3314 10K
R3308 12K
C3317 2.2u 10V KZA030WJ
IC3301 LA4635A
R/F IN1 PRE GND IN2 STBY VCC OUT2 NC PWR GND NC OUT1
C3315 0.015u (K)
C3312 2.2u 10V KZA030WJ
R3311 3.9K
R3304 2.2K
C3311 1u 10V
C3309 1000u 16V EZA216WJ
R3302 3.3K
C3303 1000P
C3301 100u 16V SYA
C3306 1u 16V TVB
Q3301 DTC314TK
Q3302 DTC314TK
R3303 3.3K
C3302 1000P
C3305 10u SYA
TO SUB6(INTERFACE)
SP_L
SP_R
C3313 2.2u 10V KZA030WJ
R3305 2.2K
C3310 1u 10V
C3304 10u SYA
C3308 1000u 16V EZA216WJ
R3310 3.9K
C3314 0.015u (K)
R3301 1.2K
C3307 1000u 16V EZA216WJ
TO SUB3(AC/DC)
SOUND_VCC
SOUND_GND
PCAP_GND
TO SUB6(INTERFACE)
L_MUTE2
SP_MUTE
DACM_R
DACM_L
S_STBY

■SUB Unit-3/7

SUB3(AC/DC)

DUNTKD674WE
(QPWBFD674WJ)

CN7701 AA003WJ
NEUTRAL COLD 2
LIVE HOT 1

F7701 250V 3.15A C3225CE
FH7701 D1014CE
FH7702 D1013CE
VA7701 VXA022WJ
C7701 0.22u 275V FZA022WJ
TH7701 HXA019WJ
(20) *L7701 FA175WJ
(20) *L7702 FA175WJ
C7702 0.22u 275V FZA022WJ

*D7701 DXA068WJ
C7703 220u 420V EZA733WJQZ
C7704 0.1uF 580V FZA162WJ
C7707 1000P KZ0103GE
C7708 1000P KZ0103GE
R7704 100K 3W RVV
R7705 22 3W RVV
D7702 DXA070WJ
D7703 DX0490CE
D7704 DX0490CE
D7706 DXA070WJ

*IC7705
STRX6768
(D30U)
D NC GND VCC SS/OLP FB OCP/BD
RDA7701 RA310WJFW
R7706 150K 2W RR

*T7701 NWA234WJ
D7732 DXA090WJ
RDA7702 RA311WJFW
R7730 2001CEFW
C7733 3300P
R7776 4001GEFW
L7732 10uH P0184CE
R7779 2001CEFW
*C7734 2200u 35V EZA503WJ
*C7736 2200u 35V EZA503WJ
*C7739 1200u 35V EZA499WJ
*C7752 1200u 35V EZA499WJ
*C7753 1200u 35V EZA499WJ
R7787 15K 1/4W RA
R7777 4001GEFW
R7735 4001GEFW

D7733 SF30SC6
5A F7702 ZA014WJ
R7708 2001CEFW
R7775 4001GEFW
L7731 22uH
C7735 2200u 16V EZA468WJ
R7732 0 RA 1/8W
C7737 1000u 16V EZA162WJ
R7734 4001GEFW
R7728 4001GEFW
R7731 4001GEFW

SG7703 CA003WJ
VA7702 VXA018WJN1
R7719 22 1/2W
R7759 1K 1/2W
R7710 22K

R7715 1K 1/8W RA
D7713 EX0640GE
R7716 22 1/2W RMD
D7711 DX0066GE
D7714 1SS244
C7715 10u 160V A4A
Q7701 2SA1013
C7716 47u 5KA
R7717 1K 1/8W
D7716 1SS244
D7717 1SS244
R7718 5.6K 1/8W TQ
C7717 3300P J YTA
(D30U) *R7709 2.2K 1/8W TQ
*R7720 2.2K 1/8W TQ
D7712 1SS244
*D7718 EX0664GE 24V
D30U:EX0664GE(24V)
R7725 15K 1/8W
D7715 EX0618GE 6.2V
C7712 2.2u KZA216WJ
*R7714 0 1/8W TQ
C7714 0.1u J YTA
R7774 4001GEFW
*C7711 680P 2000V
*R7736 0.68 2W NVV
C7713 470P
*R7737 0.39 2W NVV
R7713 100 1/2W SVC

R7729 RRHZ 0.5W 3.9M
R7724 RRHZ 0.5W 3.9M
R7752 1K
R7761 2.7 1/8W RA
R7757 2.7K 1/10W TV
R7755 10K
R7758 0 1/8W RA
Q7751 KRC104S

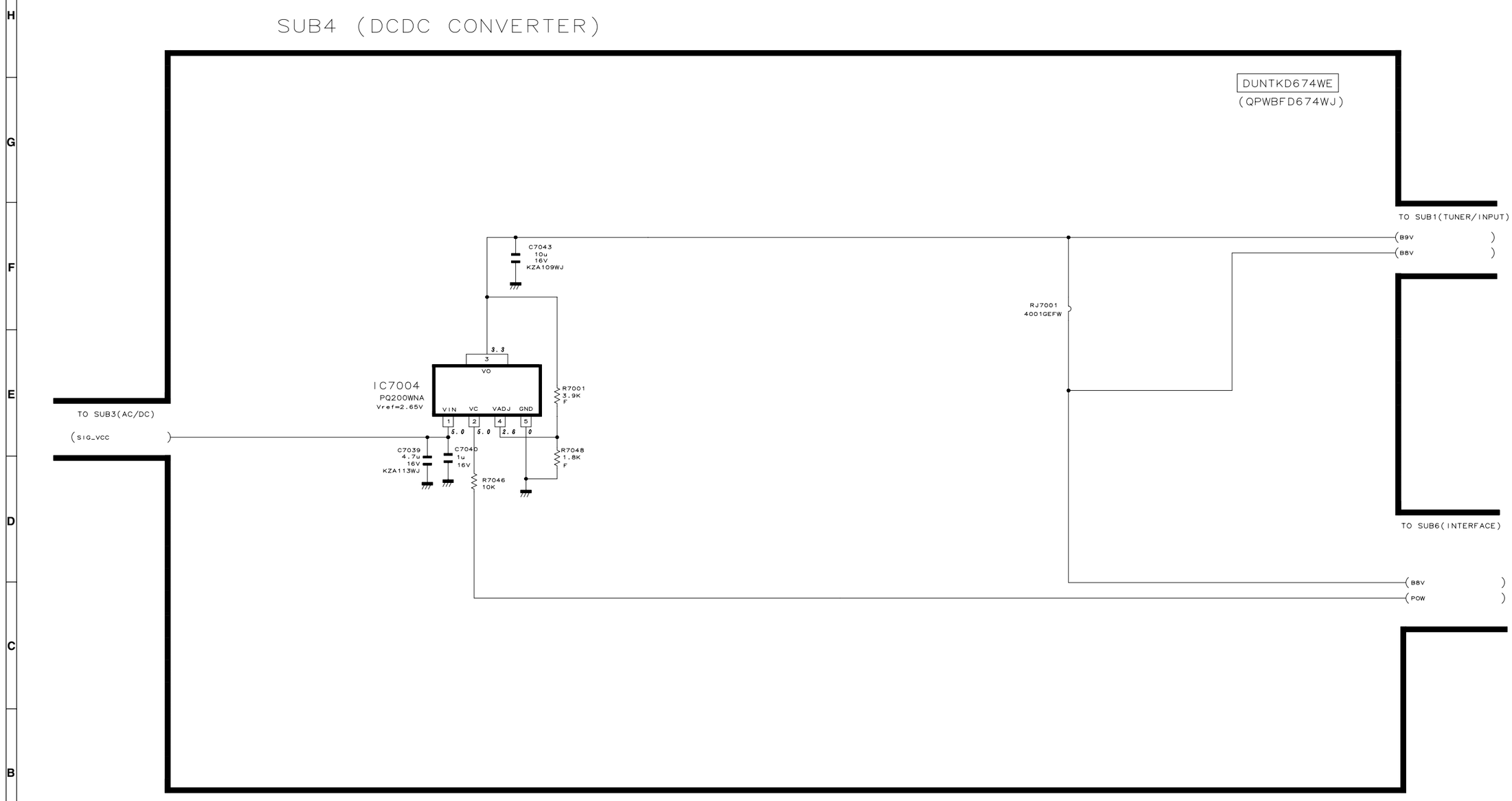
IC7702 FXA003WJ
IC7704 SE012N
IC7703 FXA003WJ
C7759 1000P 250V KZ0103GE
C7758 1500P 250V KZ0104GE

D7705 BAS316
R7703 56K
R7723 1.8K
R7726 56K
Q7702 KRC104S
Q7703 2SA1530AR

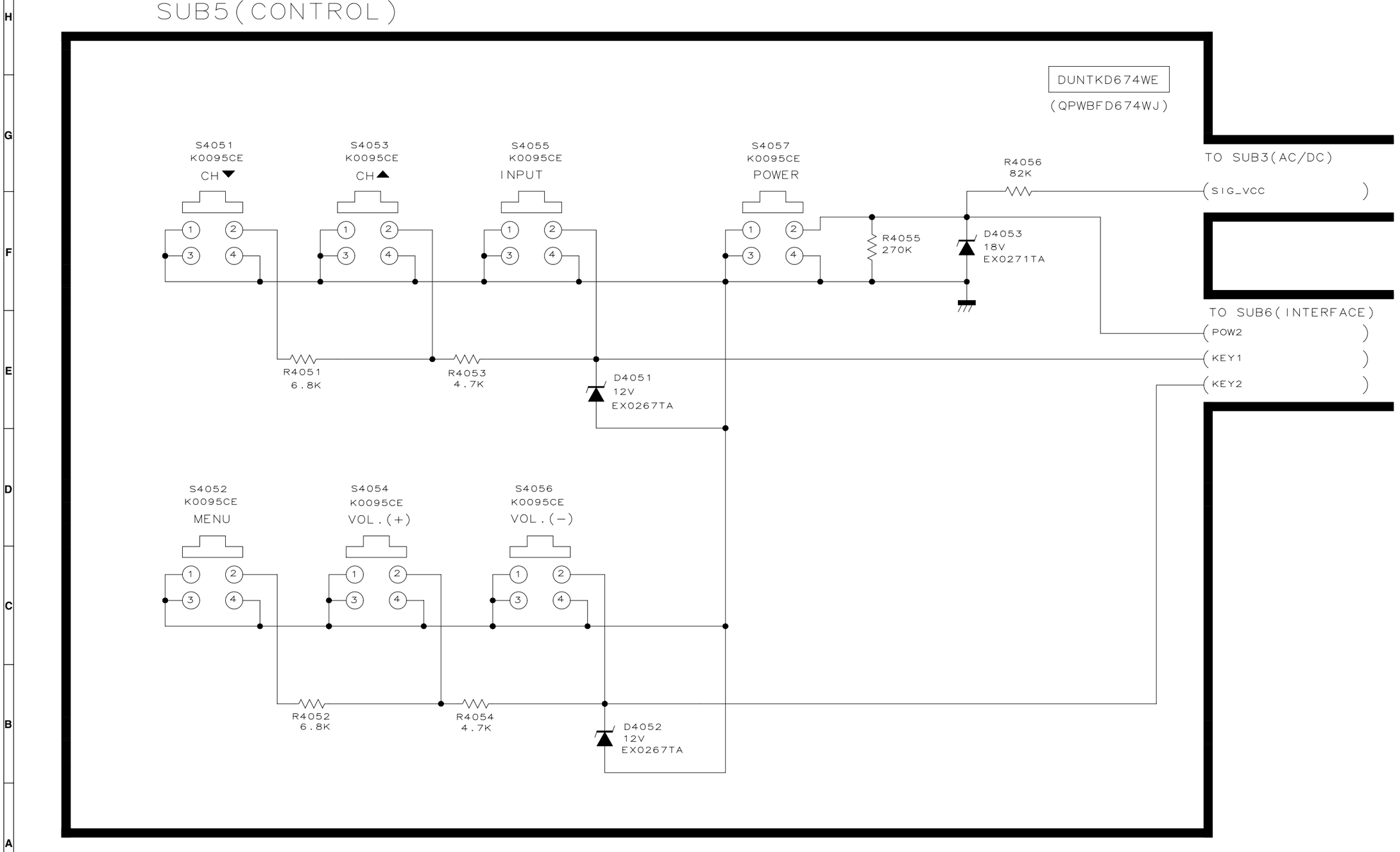
TO SUB4(DC/DC)
(SIG_VCC)
TO SUB5(CONTROL)
(SIG_VCC)
TO SUB2(SOUND)
(SOUND_VCC)
(SOUND_GND)
(PCAP_GND)
TO SUB6(INTERFACE)
(SIG_GND)
(SIG_VCC)
(INV_VCC)
(INV_GND)
(SOUND_GND)
(AC_CTRL)
(SHORT_DET)

H G F E D C B A
1 2 3 4 5 6 7 8 9 10 11 12

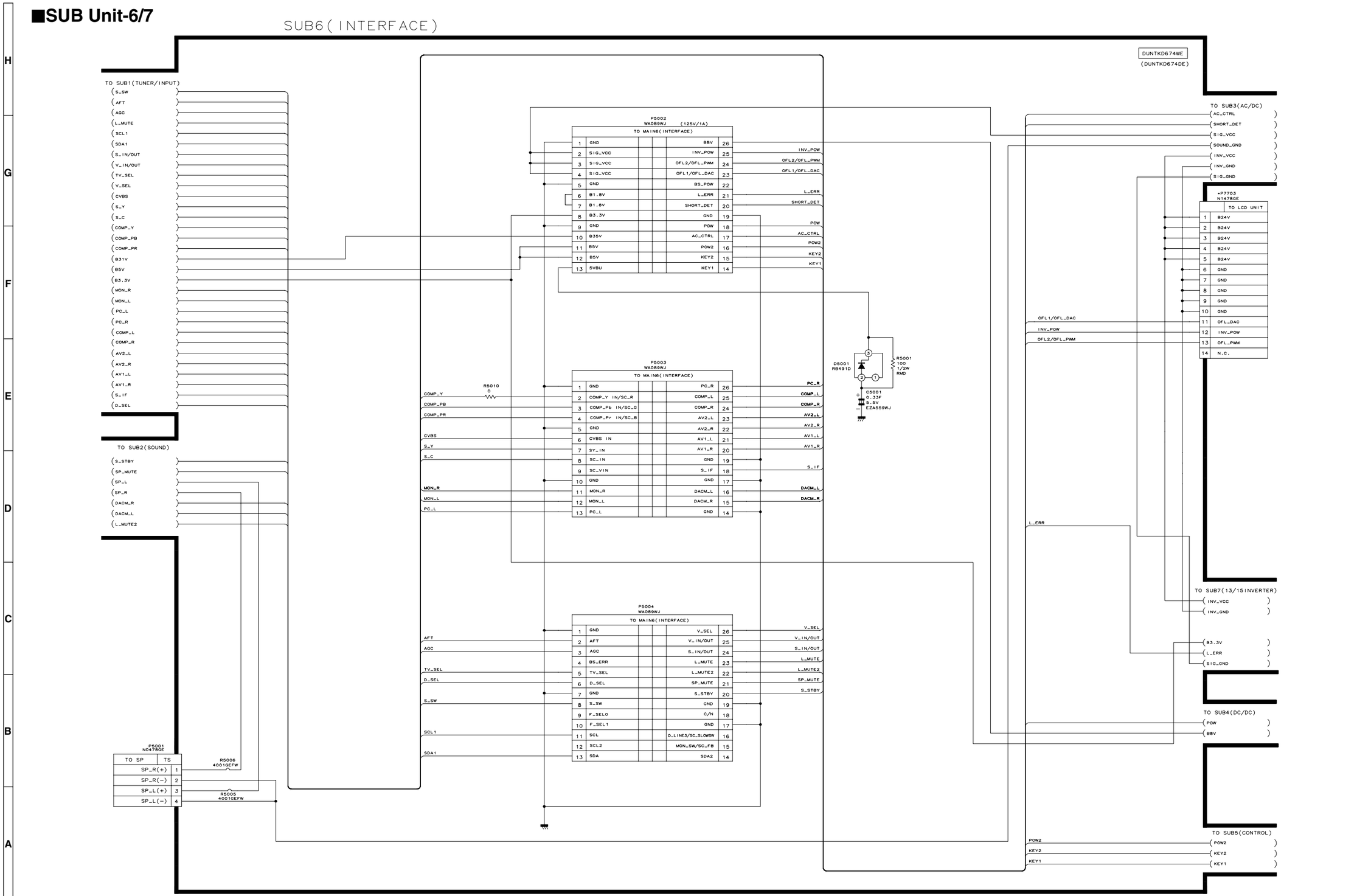
■SUB Unit-4/7


SUB4 (DCDC CONVERTER)
DUNTKD674WE
(QPWBFD674WJ)
TO SUB1(TUNER/INPUT)
B9V
B8V
TO SUB6(INTERFACE)
B8V
POW
TO SUB3(AC/DC)
SIG_VCC
C7043
10u
16V
KZA109WJ
IC7004
PQ200WNA
Vref=2.65V
VIN
VC
VADJ
GND
VO
3.3
5.0
5.0
2.6
0
R7001
3.9K
F
C7039
4.7u
16V
KZA113WJ
C7040
1u
16V
R7046
10K
R7048
1.8K
F
RJ7001
4001GEFW

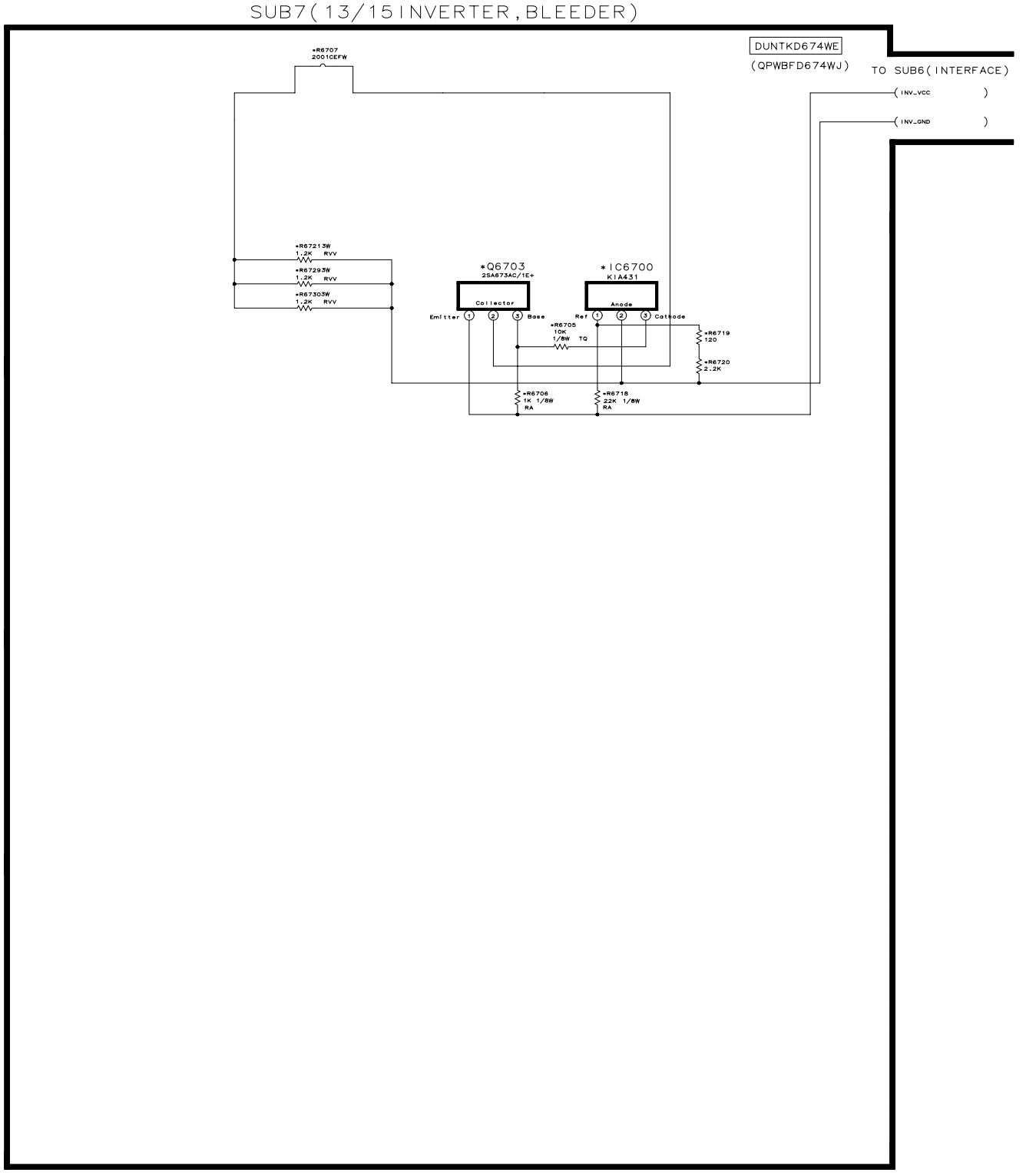
■SUB Unit-5/7


SUB5(CONTROL)
DUNTKD674WE
(QPWBFD674WJ)
S4051
K0095CE
CH▼
S4053
K0095CE
CH▲
S4055
K0095CE
INPUT
S4057
K0095CE
POWER
R4056
82K
R4055
270K
D4053
18V
EX0271TA
R4051
6.8K
R4053
4.7K
D4051
12V
EX0267TA
TO SUB3(AC/DC)
SIG_VCC
TO SUB6(INTERFACE)
POW2
KEY1
KEY2
S4052
K0095CE
MENU
S4054
K0095CE
VOL.(+)
S4056
K0095CE
VOL.(−)
R4052
6.8K
R4054
4.7K
D4052
12V
EX0267TA

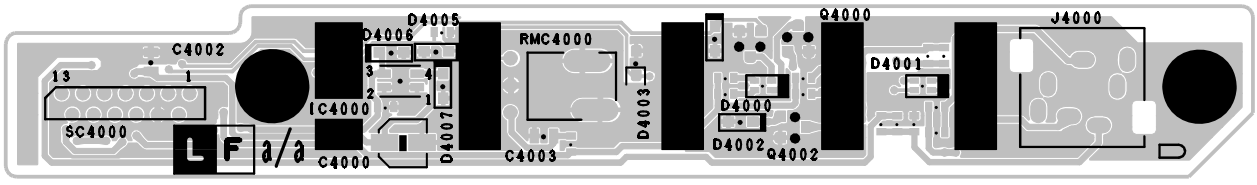
■SUB Unit-6/7


SUB6(INTERFACE)
DUNTKD674WE
(DUNTKD674DE)
TO SUB1(TUNER/INPUT)
S_SW
AFT
AGC
L_MUTE
SCL1
SDA1
S_IN/OUT
V_IN/OUT
TV_SEL
V_SEL
CVBS
S_Y
S_C
COMP_Y
COMP_PB
COMP_PR
B31V
B5V
B3.3V
MON_R
MON_L
PC_L
PC_R
COMP_L
COMP_R
AV2_L
AV2_R
AV1_L
AV1_R
S_IF
D_SEL
TO SUB2(SOUND)
S_STBY
SP_MUTE
SP_L
SP_R
DACM_R
DACM_L
L_MUTE2
P5001
N0478GE
TO SP
TS
SP_R(+) 1
SP_R(-) 2
SP_L(+) 3
SP_L(-) 4
R5006
4001GEFW
R5005
4001GEFW
P5002
WA089WJ (125V/1A)
TO MAIN6(INTERFACE)
1 GND
2 SIG_VCC
3 SIG_VCC
4 SIG_VCC
5 GND
6 B1.8V
7 B1.8V
8 B3.3V
9 GND
10 B35V
11 B5V
12 B5V
13 5VBU
26 B8V
25 INV_POW
24 OFL2/OFL_PWM
23 OFL1/OFL_DAC
22 BS_POW
21 L_ERR
20 SHORT_DET
19 GND
18 POW
17 AC_CTRL
16 POW2
15 KEY2
14 KEY1
P5003
WA089WJ
TO MAIN6(INTERFACE)
1 GND
2 COMP_Y IN/SC_R
3 COMP_Pb IN/SC_G
4 COMP_Pr IN/SC_B
5 GND
6 CVBS IN
7 SY_IN
8 SC_IN
9 SC_VIN
10 GND
11 MON_R
12 MON_L
13 PC_L
26 PC_R
25 COMP_L
24 COMP_R
23 AV2_L
22 AV2_R
21 AV1_L
20 AV1_R
19 GND
18 S_IF
17 GND
16 DACM_L
15 DACM_R
14 GND
R5010
0
P5004
WA089WJ
TO MAIN6(INTERFACE)
1 GND
2 AFT
3 AGC
4 BS_ERR
5 TV_SEL
6 D_SEL
7 GND
8 S_SW
9 F_SEL0
10 F_SEL1
11 SCL
12 SCL2
13 SDA
26 V_SEL
25 V_IN/OUT
24 S_IN/OUT
23 L_MUTE
22 L_MUTE2
21 SP_MUTE
20 S_STBY
19 GND
18 C/N
17 GND
16 D_LINE3/SC_SLOWSW
15 MON_SW/SC_FB
14 SDA2
D5001
RB491D
R5001
100
1/2W
RMD
C5001
0.33F
6.5V
EZA559WJ
TO SUB3(AC/DC)
AC_CTRL
SHORT_DET
SIG_VCC
SOUND_GND
INV_VCC
INV_GND
SIG_GND
*P7703
N1478GE
TO LCD UNIT
1 B24V
2 B24V
3 B24V
4 B24V
5 B24V
6 GND
7 GND
8 GND
9 GND
10 GND
11 OFL_DAC
12 INV_POW
13 OFL_PWM
14 N.C.
OFL1/OFL_DAC
INV_POW
OFL2/OFL_PWM
L_ERR
TO SUB7(13/15INVERTER)
INV_VCC
INV_GND
B3.3V
L_ERR
SIG_GND
TO SUB4(DC/DC)
POW
B8V
TO SUB5(CONTROL)
POW2
KEY2
KEY1

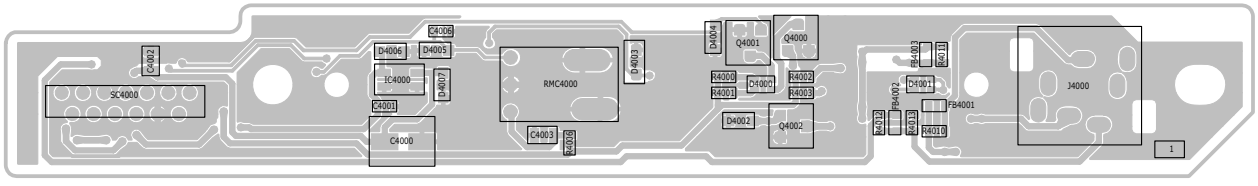
■SUB Unit-7/7


SUB7(13/15INVERTER,BLEEDER)
DUNTKD674WE
(QPWBFD674WJ)
TO SUB6(INTERFACE)
(INV_VCC)
(INV_GND)
*R6707
2001CEFW
*R6721 3W
1.2K RVV
*R6729 3W
1.2K RVV
*R6730 3W
1.2K RVV
*Q6703
2SA673AC/1E+
Collector
Emitter
Base
*IC6700
KIA431
Anode
Ref
Cathode
*R6705
10K
1/8W TQ
*R6719
120
*R6720
2.2K
*R6706
1K 1/8W
RA
*R6718
22K 1/8W
RA

PRINTED WIRING BOARD ASSEMBLIES

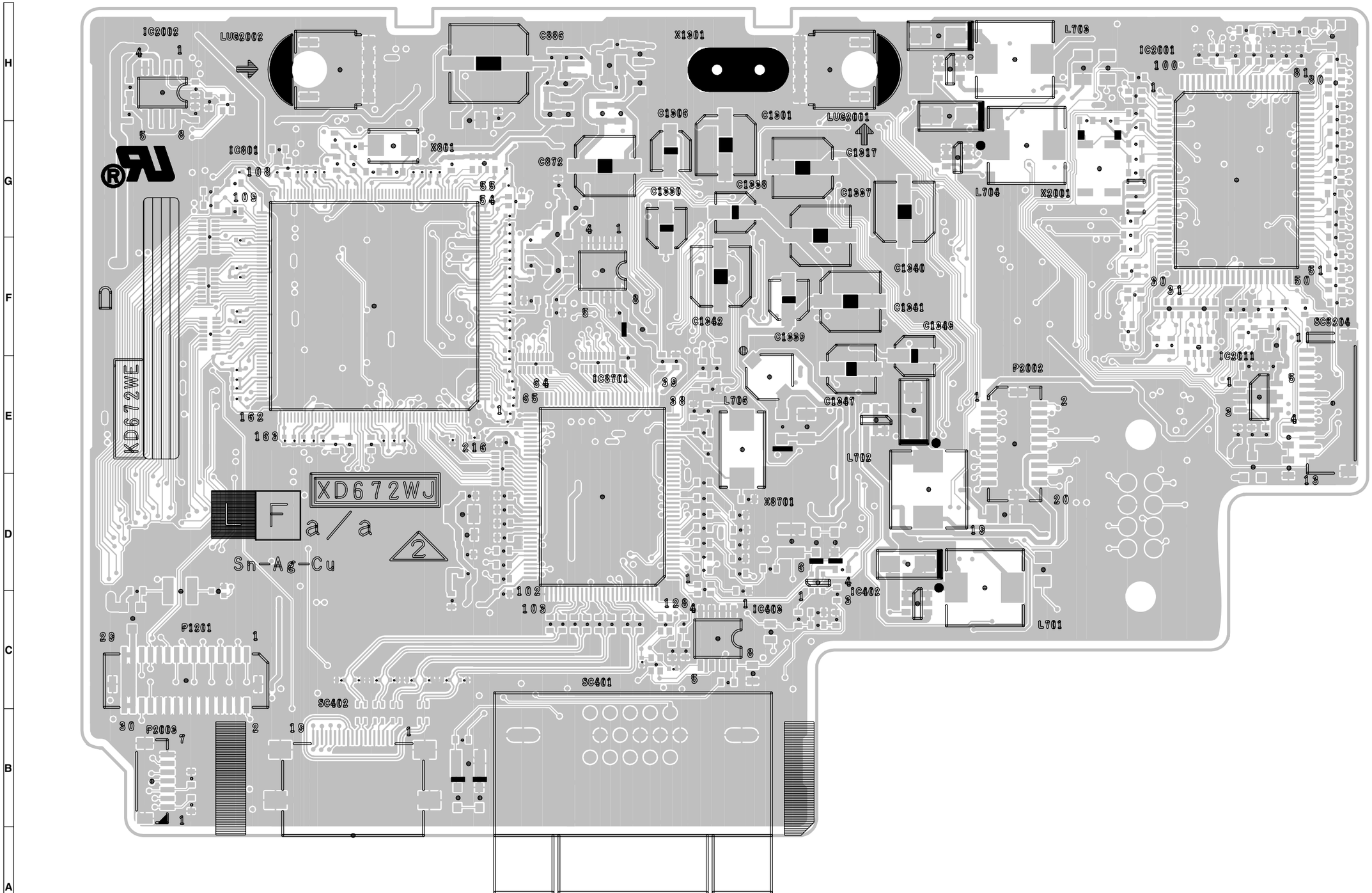


R/C, LED Unit (Component Side)
(QPWBSD676WJZZ)

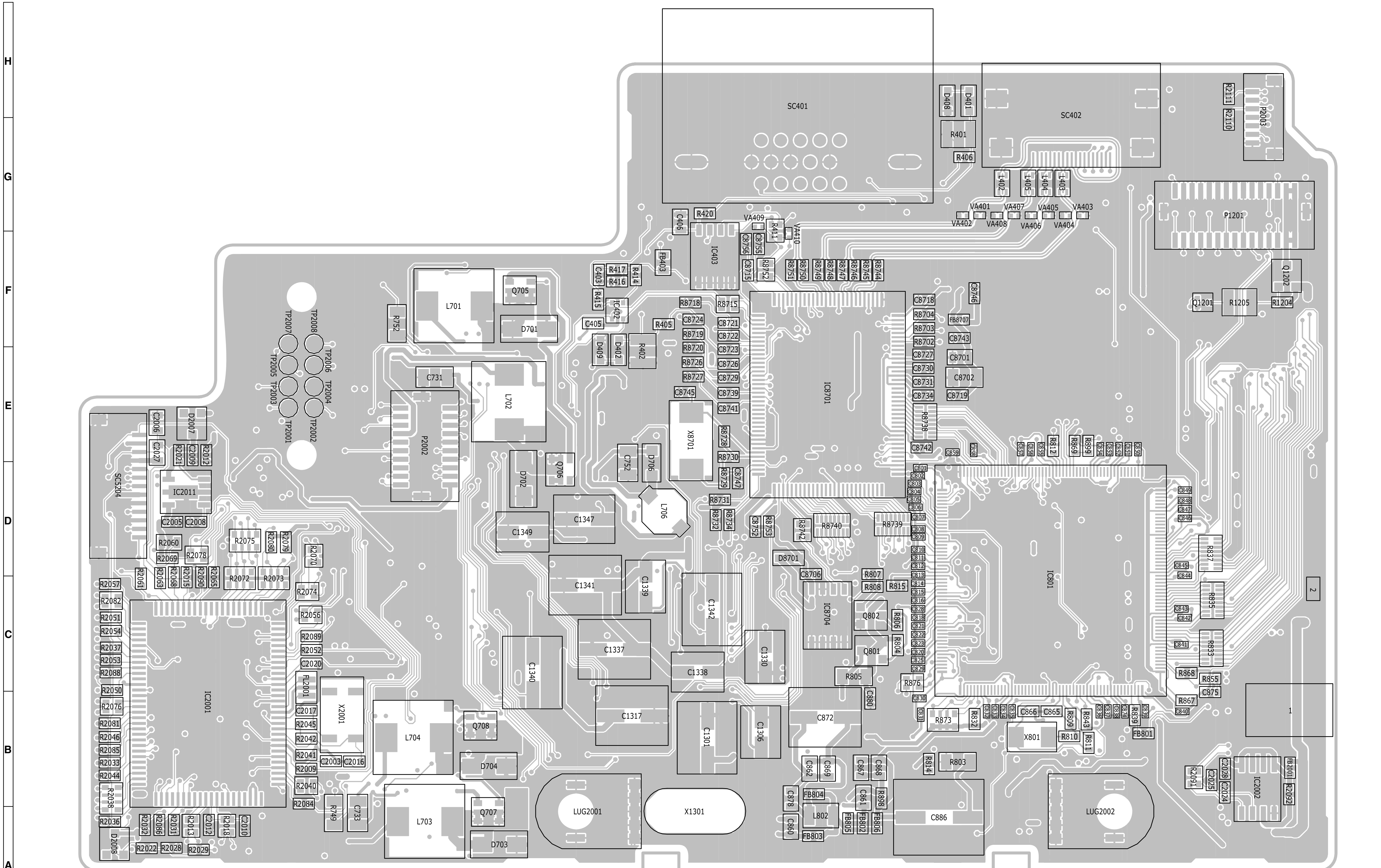


R/C, LED Unit (Chip Parts Side)
(QPWBSD676WJZZ)

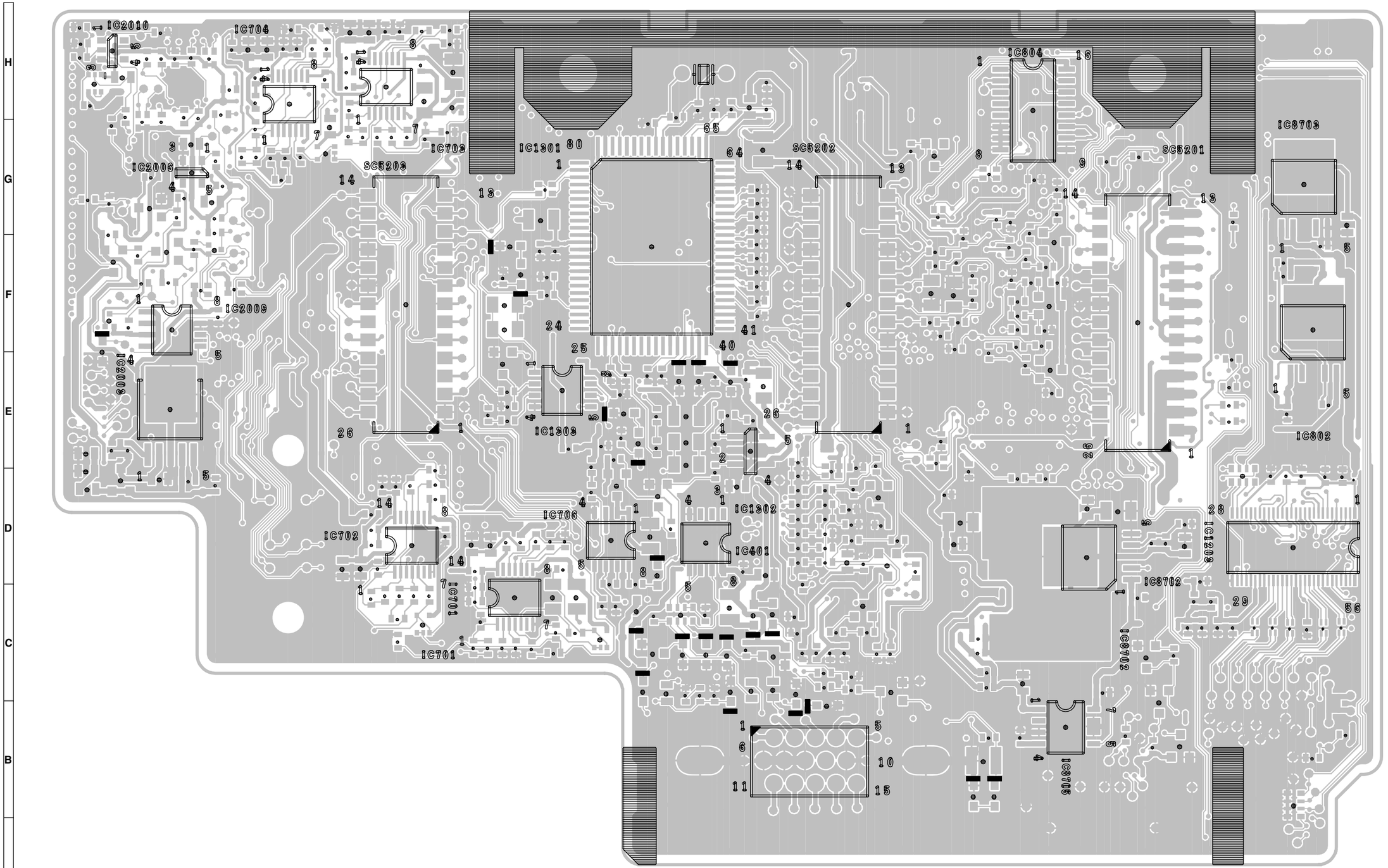
1	2	3	4	5	6



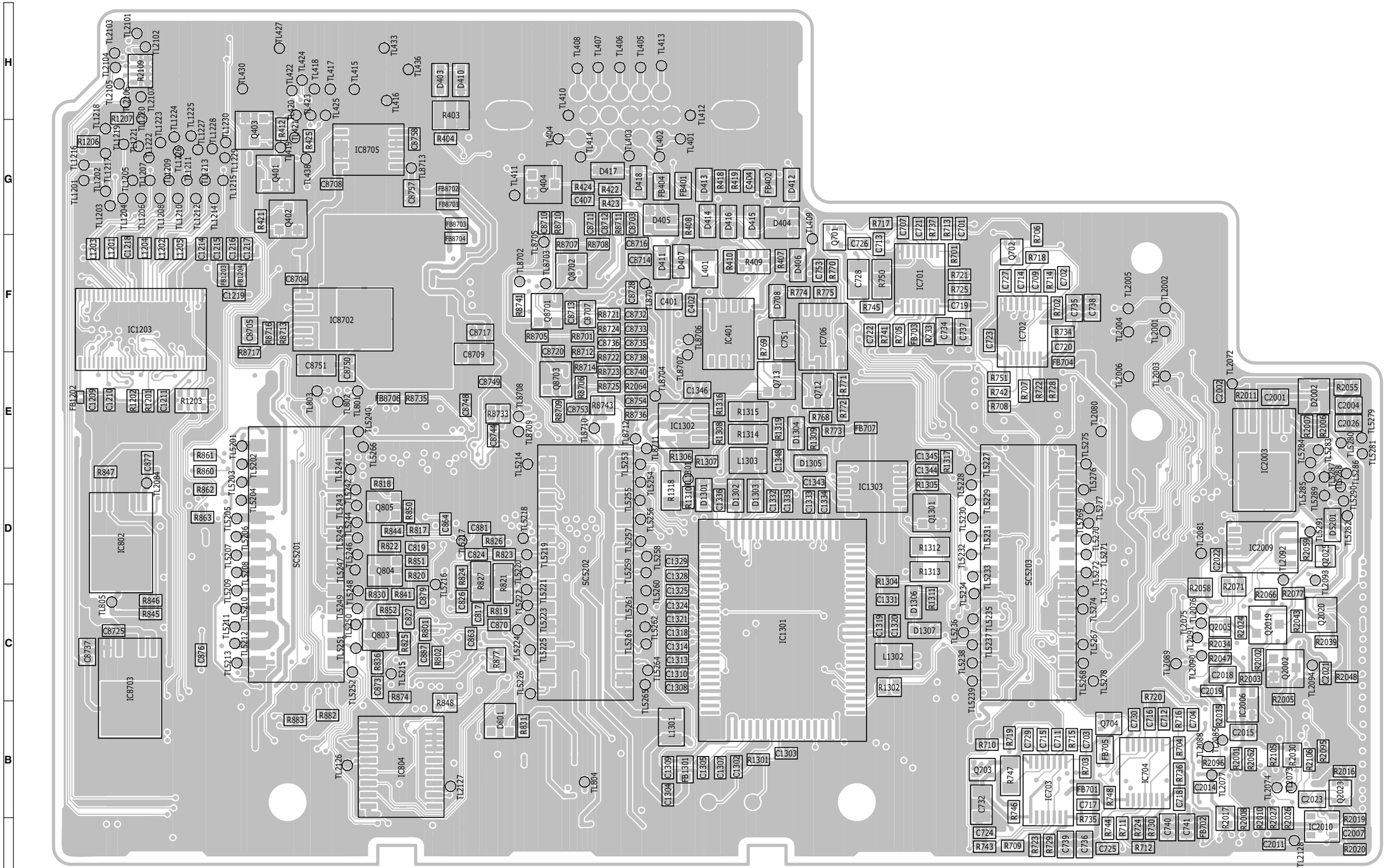
MAIN Unit (Side-A)


H
G
F
E
D
C
B
A
SC401
SC402
D408
D401
R401
R406
R2111
R2110
P2003
L402
L405
L404
L403
VA401
VA407
VA405
VA403
VA402
VA408
VA406
VA404
P1201
Q1202
Q1201
R1205
R1204
C406
R420
VA409
R411
VA410
IC403
C8756
C8755
FB403
C8715
R8752
R8751
R8750
R8749
R8748
R8747
R8746
R8745
R8744
C403
R417
R416
R414
R415
IC402
C405
R405
D409
D402
R402
R8718
R8715
C8724
R8719
R8720
R8726
R8727
C8745
C8721
C8722
C8723
C8726
C8729
C8739
C8741
IC8701
C8718
R8704
R8703
R8702
C8727
C8730
C8731
C8734
R8738
C8742
C8746
FB8707
C8743
C8701
C8702
C8719
C859
C858
C857
C856
C855
R812
R869
R899
C854
C853
C852
C851
C850
TP2007
TP2008
TP2005
TP2006
TP2003
TP2004
TP2001
TP2002
L701
R752
Q705
D701
C731
L702
P2002
D702
Q706
C752
D706
X8701
R8728
R8730
R8729
C8747
R8731
R8732
R8734
L706
C1347
C1349
C1341
C1339
C1342
C1337
C1340
C1338
C1330
C1317
C1301
C1306
C8752
R8753
R8742
R8740
R8739
D8701
C8706
IC8704
R807
R808
R815
Q802
R806
Q801
R804
R805
R876
C880
C872
C801
C802
C803
C804
C805
C806
C807
C808
C809
C810
C811
C812
C813
C814
C815
C816
C828
C818
C821
C822
C823
C820
C825
C829
C830
C831
R873
R832
C832
C833
C834
C835
C866
C865
R809
R843
C836
C837
C838
C874
R839
C839
X801
R810
R811
FB801
IC801
C849
C848
C847
C846
R837
C845
C844
R835
C843
C842
R833
C841
R868
R855
C875
R867
C840
2
1
C2006
D2007
C2027
R2021
C2009
R2012
SC5204
IC2011
C2005
C2008
R2060
R2069
R2078
R2075
R2080
R2079
R2070
R2061
R2063
R2068
R2015
R2090
R2065
R2072
R2073
R2074
R2057
R2082
R2051
R2054
R2037
R2053
R2088
R2050
R2076
R2081
R2046
R2085
R2033
R2044
R2038
R2036
D2008
IC2001
R2056
R2089
R2052
C2020
FL2001
X2001
C2017
R2045
R2042
R2041
C2003
C2016
R2009
R2040
R2084
R749
C733
R2032
R2086
R2031
R2013
C2012
R2018
C2010
R2022
R2028
R2029
L704
Q708
D704
L703
Q707
D703
LUG2001
X1301
C862
C869
C867
C868
R814
R803
C878
FB804
C861
R898
L802
C860
FB803
FB805
FB802
FB806
C886
LUG2002
R2091
C2028
C2025
C2024
IC2002
FB2001
R2092
1
2
3
4
5
6
7
8
9
10
11
12

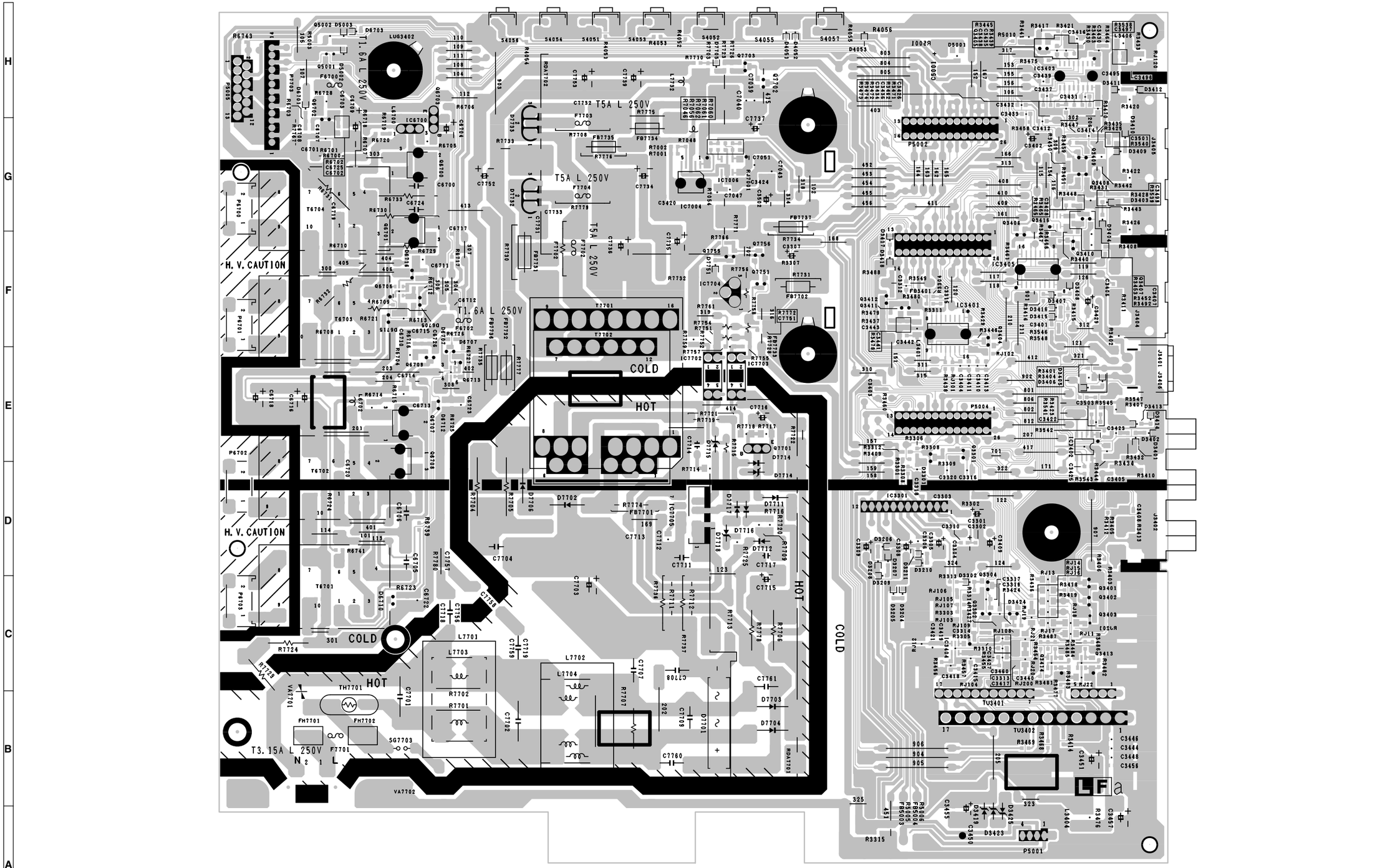
MAIN Unit (Chip Parts Side-A)



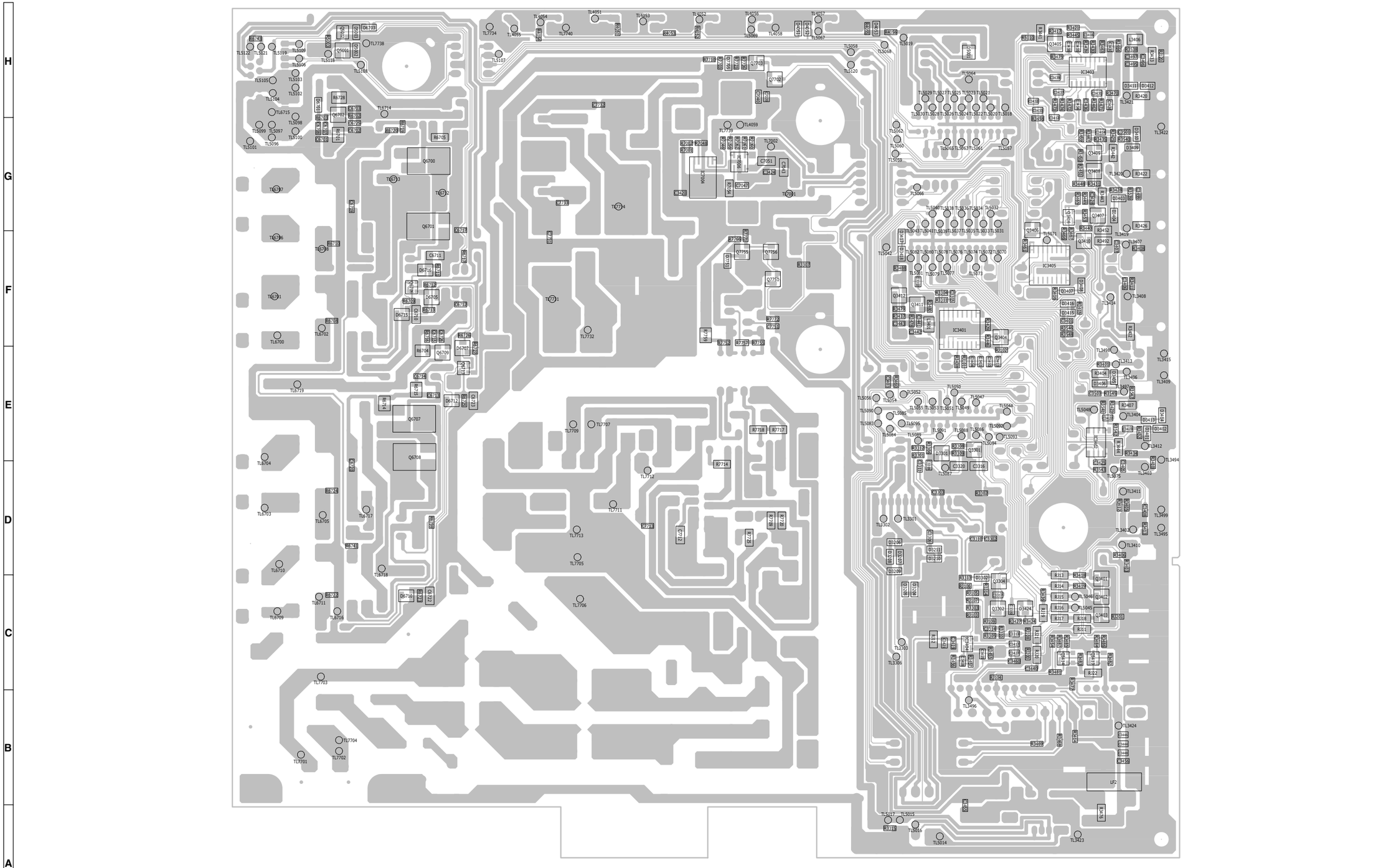
MAIN Unit (Side-B)



MAIN Unit (Chip Parts Side-B)



SUB Unit (Wiring Side)
(QPWBFD674WJN1)



SUB Unit (Chip Parts Side)
(QPWBFD674WJN1)

PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual ; electrical components having such features are identified by ⚠ and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does no have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER 2. REF. NO.
3. PART NO. 4. DESCRIPTION

in **USA**: Contact your nearest SHARP Parts Distributor to order. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

Note: * The reference numbers on the PWB are arranged in alphabetical order.

★ MARK: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code

PRINTED WIRING BOARD ASSEMBLYS
(NOT REPLACEMENT ITEM)

	DUNTKD672FM03	–	MAIN Unit	—
	DUNTKD674FM03	–	SUB Unit	—
	DUNTKD676FM03	–	R/C,LED Unit	—
	CPWBX3335TPZZ	J	LCD Control Unit	BR
	RDENC2228TPZZ	J	Inverter Unit	BK

LCD PANEL

NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

	R1LK200T3LZ10Y	J	20" LCD Panel Module Unit Ass'y	DZ

LISTE DES PIECES

CHANGE DES PIECES

Les pi`eces de rechange qui pr élelesentent ces caract éleristiques sp éleciales de s élecurit éle, sont identifi élees dans ce manuel : les pi`eces élelectriques qui pr élesentent ces particularit éles, sont rep éler élee par la marque ⚠ et sont hachur élees dans les listes de pi`eces et dans les diagrammes sch élematiques.

La substitution d'une pi`ece de rechange par une autre qui ne pr éLesente pas les m éoemes caract éLeristiques de s élecurit éle que la pi`ece recommand élee parl'usine et dans ce manuel de service, peut provoquer une éLelectrocution, un incendie ou toutautre sinistre.

"COMMENT COMMANDER LES PIECES DE RECHANGE"

Pour que votre commande soit rapidement et correctement remplie, veuillez fournir les renseignements suivants.

1. NUMERO DU MODELE 2. NO. DE REF
3. NO. DE PIECE 4. DESCRIPTION

in **CANADA**: Contact SHARP Electronics of Canada Limited Phone (416) 890-2100

Note: * Les numéros de référence sur la plaquette de circuit imprimé sont rangés dans l'ordre alphabétique.

★ MARQUE: SECTION LIVRAISON DES PIECES DERECHANGE

Ref. No.	Part No.	★	Description	Code

DUNTKD672FM03
MAIN Unit

CAPACITORS

C401	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C402	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C403	VCCCCY1HH330JY	J	33p	50V	Ceramic	AA
C404	VCCCCY1HH330JY	J	33p	50V	Ceramic	AA
C405	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C406	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C407	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C701	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C702	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C704	VCKYCY1EB333KY	J	0.033	25V	Ceramic	AA
C707	VCCCCY1HH102JY	J	1000p	50V	Ceramic	AB
C709	VCCCCY1HH102JY	J	1000p	50V	Ceramic	AB
C712	VCCCCY1HH331JY	J	330p	50V	Ceramic	AA
C718	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C719	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C720	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C721	VCCCCY1HH181JY	J	180p	50V	Ceramic	AA
C722	VCKYCY1EB123KY	J	0.012	25V	Ceramic	AA
C723	VCKYCY1EB123KY	J	0.012	25V	Ceramic	AA
C725	VCKYCY1EB123KY	J	0.012	25V	Ceramic	AA
C726	VCCCCY1HH102JY	J	1000p	50V	Ceramic	AB
C727	VCCCCY1HH102JY	J	1000p	50V	Ceramic	AB
C728	RC-KZA109WJZZY	J	10	16V	Ceramic	AC
C730	VCCCCY1HH102JY	J	1000p	50V	Ceramic	AB
C731	RC-KZA109WJZZY	J	10	16V	Ceramic	AC
C733	RC-KZA109WJZZY	J	10	16V	Ceramic	AC
C734	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C735	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C737	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C738	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C740	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C741	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C751	RC-KZA109WJZZY	J	10	16V	Ceramic	AC
C752	RC-KZA215WJZZY	J	1	50V	Ceramic	AC
C753	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C801	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C802	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C803	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C804	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C805	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB

DUNTKD672FM03
MAIN Unit (Continued)

Ref. No.	Part No.	★	Description			Code
C806	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C807	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C808	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C809	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C810	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C811	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C812	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C813	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C814	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C815	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C816	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C817	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C818	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C819	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C820	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C821	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C822	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C823	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C824	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C825	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C826	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C827	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C828	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C829	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C830	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C831	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C832	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C833	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C834	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C835	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C836	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C837	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C838	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C839	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C840	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C841	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C842	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C843	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C844	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C845	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C846	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C847	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C848	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C849	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C850	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C851	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C852	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C853	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C854	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C855	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C856	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C857	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C858	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C859	VCKYCZ1AB333KY	J	0.033	10V	Ceramic	AB
C860	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C861	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C862	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C863	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C864	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C865	VCCCCY1HH6R0DY	J	60p	50V	Ceramic	AA
C866	VCCCCY1HH6R0DY	J	60p	50V	Ceramic	AA
C867	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C874	VCKYCZ1AB104KY	J	0.1	10V	Ceramic	AB
C875	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C876	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C877	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C878	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C887	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1209	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1210	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1211	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1214	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1215	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1216	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1217	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1218	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1219	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1301	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C1302	VCCCCY1HH5R0CY	J	50p	50V	Ceramic	AA
C1303	VCCCCY1HH5R0CY	J	50p	50V	Ceramic	AA
C1304	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C1305	VCCCCY1HH560JY	J	56p	50V	Ceramic	AB
C1306	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C1307	VCCCCY1HH560JY	J	56p	50V	Ceramic	AB
C1308	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1309	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1317	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C1319	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1320	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C1329	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1330	VCEASX1HN335MY	J	3.3	50V	Electrolytic	AB
C1331	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C1332	VCKYCY1EB223KY	J	0.022	25V	Ceramic	AA
C1333	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C1334	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C1335	VCKYCY1EB223KY	J	0.022	25V	Ceramic	AA
C1336	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1337	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C1338	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C1340	VCEASX0JN227MY	J	220	6.3V	Electrolytic	AC
C1342	VCEASX0JN227MY	J	220	6.3V	Electrolytic	AC
C1343	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1344	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C1345	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C1347	VCEASX1AN336MY	J	33	10V	Electrolytic	AC
C1348	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C1349	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C2001	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C2002	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2004	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C2005	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2006	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C2008	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2009	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2010	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C2012	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C2014	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2015	VCKYTV1CF684ZY	J	0.68	16V	Ceramic	AB
C2016	VCCCCY1HH100DY	J	10p	50V	Ceramic	AA
C2017	VCCCCY1HH100DY	J	10p	50V	Ceramic	AA
C2018	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C2019	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2020	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C2021	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2022	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2026	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C2027	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C2028	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8701	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C8704	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C8705	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C8706	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8707	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C8709	RC-KZA070WJZZY	J	22	6.3V	Ceramic	AD
C8710	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8711	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8712	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8713	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8714	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8715	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8717	RC-KZA176WJZZY	J	10	10V	Ceramic	AC
C8718	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8719	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C8721	VCKYCY1CB473KY	J	0.047	16V	Ceramic	AA
C8722	VCKYCY1CB473KY	J	0.047	16V	Ceramic	AA
C8723	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA

DUNTKD672FM03

MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
C8724	VCKYCY1CB473KY	J	0.047 16V Ceramic	AA
C8725	VCKYCY1AB105KY	J	1 10V Ceramic	AB
C8726	VCKYCY1CB473KY	J	0.047 16V Ceramic	AA
C8727	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C8728	VCKYCY1CB473KY	J	0.047 16V Ceramic	AA
C8729	VCKYCY1CB473KY	J	0.047 16V Ceramic	AA
C8730	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C8731	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C8732	VCKYCY1CB473KY	J	0.047 16V Ceramic	AA
C8733	VCKYCY1CB473KY	J	0.047 16V Ceramic	AA
C8734	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C8735	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C8736	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C8737	RC-KZA176WJZZY	J	10 10V Ceramic	AC
C8738	VCKYCY1CB473KY	J	0.047 16V Ceramic	AA
C8739	VCKYCY1CB473KY	J	0.047 16V Ceramic	AA
C8740	VCKYCY1CB473KY	J	0.047 16V Ceramic	AA
C8741	VCKYCY1CB473KY	J	0.047 16V Ceramic	AA
C8742	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C8743	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C8744	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C8745	VCCCCY1HH220JY	J	22p 50V Ceramic	AA
C8746	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C8747	VCCCCY1HH220JY	J	22p 50V Ceramic	AA
C8748	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C8749	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C8750	RC-KZA176WJZZY	J	10 10V Ceramic	AC
C8752	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C8753	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA

DIODES

D406	VHDBAS316//-1Y	J	Diode	AB
D407	VHDBAS316//-1Y	J	Diode	AB
D411	VHDBAS316//-1Y	J	Diode	AB
D412	VHDBAS316//-1Y	J	Diode	AB
D414	RH-EX0267TAZZY	J	Zener Diode, 12V	AB
D415	RH-EX0267TAZZY	J	Zener Diode, 12V	AB
D701	VHDRB051L40-1Y	J	Diode	AD
D702	VHDRB051L40-1Y	J	Diode	AD
D704	VHDRB051L40-1Y	J	Diode	AD
D706	VHDRB160M60-1Y	J	Diode	AC
D801	VHD1PS184++-1Y	J	Diode	AB
D1301	RH-EX0267TAZZY	J	Zener Diode, 12V	AB
D1302	RH-EX0267TAZZY	J	Zener Diode, 12V	AB
D1303	RH-EX0267TAZZY	J	Zener Diode, 12V	AB
D1304	RH-EX0267TAZZY	J	Zener Diode, 12V	AB
D1305	RH-EX0267TAZZY	J	Zener Diode, 12V	AB
D1306	RH-EX0267TAZZY	J	Zener Diode, 12V	AB
D1307	RH-EX0267TAZZY	J	Zener Diode, 12V	AB
D2002	VHD1PS184++-1Y	J	Diode	AB
D2007	VHDRB491D++-1Y	J	Diode	AD
D5201	RH-EX0267TAZZY	J	Zener Diode, 12V	AB
D8701	VHDBAS316//-1Y	J	Diode	AB

MISCELLANEOUS PARTS

FB401	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB402	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB403	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB404	RBLN-0060TAZZY	J	Ferrite Bead	AB
FB702	RBLN-0253TAZZY	J	Ferrite Bead	AA
FB703	RBLN-0253TAZZY	J	Ferrite Bead	AA
FB704	RBLN-0253TAZZY	J	Ferrite Bead	AA
FB705	RBLN-0209TAZZY	J	Ferrite Bead	AB
FB707	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB801	RBLN-0083GEZZY	J	Ferrite Bead	AB
FB802	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB803	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB806	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1202	RBLN-A010WJZZY	J	Ferrite Bead	AB
FB1203	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB1204	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB1301	RBLN-0035TAZZY	J	Ferrite Bead	AB
FB2001	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB8703	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB8704	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB8706	RBLN-0067TAZZY	J	Ferrite Bead	AC
FB8707	RBLN-0050TAZZY	J	Ferrite Bead	AA

FILTER

FL2001	RFiLZA003WJPZY	J	Filter	AD

INTEGRATED CIRCUITS

IC401	VHiBR24C21F-1Y	J	BR24C21F-E2	AG
IC402	VHiNC7WZ14P-1Y	J	NC7WZ14P6X	AD
IC403	VHiBR24L02F1EY	J	BR24L02F-WE2	AE
IC701	RH-iXA828WJZZY	J	BD9300FV-FE2	AH
IC702	RH-iXA828WJZZY	J	BD9300FV-FE2	AH
IC704	RH-iXA828WJZZY	J	BD9300FV-FE2	AH
IC706	VHiMM3203B+-1Y	J	MM3203BFBE	AG
IC801	RH-iXB181WJZZQ	J	R8J66607A02FP	BG
IC802	VHiPQ200WNA-1Y	J	PQ200WNA1ZPH	AG
IC1203	VHiV385AGLF-1Y	J	ICSV385AGLFT	AK
IC1301	RH-iX3370CEN2Q	J	MSP3440G-QA-C12	AX
IC1303	VHiBH3544F+-1Y	J	BH3544F-E2	AE
IC2001	RH-iXA633WJN1Q	J	M30626FHPFPU5C	BM
IC2002	VHiTMP75ADR-1Y	J	TMP75AIDR	AG
IC2003	VHiSi3010KM-1Y	J	SI-3010KM-TL	AF
IC2006	VHiPST3229N1EY	J	PST3229NR	AD
IC2009	VHiBR24L32F-1Y	J	BR24L32F-WE2	AG
IC2010	VHiPST3229N1EY	J	PST3229NR	AD
IC2011	VHiPQ1L333M-1Y	J	PQ1L333M2SPQ	AD
IC8701	VHiMST3385M-1Q	J	MST3385M-LF-11	BF
IC8702	VHiPQ200WNA-1Y	J	PQ200WNA1ZPH	AG
IC8703	VHiPQ025ENA-1Y	J	PQ025ENA1ZPH	AE
IC8704	RH-iXB717WJZZY	J	3IC100000AA54	AP

COILS

L401	VPCNN220J2R9NY	J	Peaking 22µH	AB
L402	RCiLFA116WJZZY	J	Coil	AE
L403	RCiLFA116WJZZY	J	Coil	AE
L404	RCiLFA116WJZZY	J	Coil	AE
L405	RCiLFA116WJZZY	J	Coil	AE
L701	RCiLPA154WJZZY	J	Coil	AE
L702	RCiLPA154WJZZY	J	Coil	AE
L704	RCiLPA154WJZZY	J	Coil	AE
L706	RCiLPA051WJZZY	J	Coil	AD
L1201	RCiLFA071WJZZY	J	Coil	AD
L1202	RCiLFA071WJZZY	J	Coil	AD
L1203	RCiLFA071WJZZY	J	Coil	AD
L1204	RCiLFA071WJZZY	J	Coil	AD
L1205	RCiLFA071WJZZY	J	Coil	AD
L1301	VPCNN101J7R7NY	J	Peaking 100µH	AB
L1302	VPCNN4R7J1R2NY	J	Peaking 4.7µH	AB
L1303	VPCNN101J7R7NY	J	Peaking 100µH	AB

MISCELLANEOUS PARTS

LUG2001	QLUGHA006WJZZY	J	Lug	AC
LUG2002	QLUGHA006WJZZY	J	Lug	AC
P1201	QPLGNA413WJZZY	J	Plug, 30-pin	AH
P2003	QPLGN0057CEZZY	J	Plug, 7-pin	AD

TRANSISTORS

Q401	VSKRC104S//-1Y	J	KRC104S	AA
Q403	VSKRC104S//-1Y	J	KRC104S	AA
Q404	VSKRC104S//-1Y	J	KRC104S	AA
Q701	VSUML2N++++-1Y	J	UML2N	AC
Q702	VSUML2N++++-1Y	J	UML2N	AC
Q704	VSUML2N++++-1Y	J	UML2N	AC
Q705	VSRTQ035P02-1Y	J	RTQ035P02	AD
Q706	VSRTQ035P02-1Y	J	RTQ035P02	AD
Q708	VSRTQ035P02-1Y	J	RTQ035P02	AD
Q712	VSFMMT718//-1Y	J	FMMT718	AE
Q713	VSKRC104S//-1Y	J	KRC104S	AA
Q801	VSFMMT718//-1Y	J	FMMT718	AE
Q802	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q803	VS2SC3928AR-1Y	J	2SC3928AR	AB

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MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
Q804	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q805	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q1201	VSDTC143ZE/-1Y	J	DTC143ZE	AB
Q1202	VSFMMT718//-1Y	J	FMMT718	AE
Q1301	VSKRC104S//-1Y	J	KRC104S	AA
Q2002	VSKRC104S//-1Y	J	KRC104S	AA
Q2005	VSRDTC114YE-1Y	J	RDTC114YE	AA
Q2019	VSKRC102S//-1Y	J	KRC102S	AA
Q2020	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q2025	VSDTC143ZE/-1Y	J	DTC143ZE	AB
Q8701	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q8702	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q8703	VS2SC3928AR-1Y	J	2SC3928AR	AB

RESISTORS

Ref. No.	Part No.	★				Code
R401	VRS-TW2HF750JY	J	75	1/2W	Metal Oxide	AA
R402	VRS-TW2HF750JY	J	75	1/2W	Metal Oxide	AA
R403	VRS-TW2HF750JY	J	75	1/2W	Metal Oxide	AA
R404	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R405	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R406	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R407	VRS-CY1JF473JY	J	47k	1/16W	Metal Oxide	AA
R408	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R409	VRS-CH1JF101JY	J	100	1/16W	Metal Oxide	AA
R410	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R411	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R412	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R414	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R415	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R416	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R417	VRS-CY1JF271JY	J	270	1/16W	Metal Oxide	AA
R418	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R419	VRS-CY1JF271JY	J	270	1/16W	Metal Oxide	AA
R421	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R423	VRS-CY1JF473JY	J	47k	1/16W	Metal Oxide	AA
R424	VRS-CY1JF473JY	J	47k	1/16W	Metal Oxide	AA
R701	VRS-CY1JF333JY	J	33k	1/16W	Metal Oxide	AA
R702	VRS-CY1JF333JY	J	33k	1/16W	Metal Oxide	AA
R704	VRS-CY1JF333JY	J	33k	1/16W	Metal Oxide	AA
R705	VRS-CY1JF104DY	J	100k	1/16W	Metal Oxide	AA
R706	VRS-CY1JF104DY	J	100k	1/16W	Metal Oxide	AA
R707	VRS-CY1JF104DY	J	100k	1/16W	Metal Oxide	AA
R708	VRS-CY1JF104DY	J	100k	1/16W	Metal Oxide	AA
R711	VRS-CY1JF104DY	J	100k	1/16W	Metal Oxide	AA
R712	VRS-CY1JF104DY	J	100k	1/16W	Metal Oxide	AA
R713	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R714	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R716	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R717	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R718	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R720	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R721	VRS-CY1JF333FY	J	33k	1/16W	Metal Oxide	AA
R722	VRS-CY1JF394FY	J	390k	1/16W	Metal Oxide	AA
R724	VRS-CY1JF104FY	J	100k	1/16W	Metal Oxide	AA
R725	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
R728	VRS-CY1JF203FY	J	20k	1/16W	Metal Oxide	AA
R730	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
R733	VRS-CY1JF104FY	J	100k	1/16W	Metal Oxide	AA
R734	VRS-CY1JF333FY	J	33k	1/16W	Metal Oxide	AA
R736	VRS-CY1JF223FY	J	22k	1/16W	Metal Oxide	AA
R737	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R741	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R742	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R744	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R745	VRS-CY1JF511JY	J	510	1/16W	Metal Oxide	AA
R748	VRS-CY1JF511JY	J	510	1/16W	Metal Oxide	AA
R749	VRS-TQ2BD511JY	J	510	1/8W	Metal Oxide	AA
R750	VRS-TQ2BD511JY	J	510	1/8W	Metal Oxide	AA
R751	VRS-CY1JF511JY	J	510	1/16W	Metal Oxide	AA
R752	VRS-TQ2BD511JY	J	510	1/8W	Metal Oxide	AA
R768	VRS-CY1JF272JY	J	2.7k	1/16W	Metal Oxide	AA
R769	VRS-CY1JF392JY	J	3.9k	1/16W	Metal Oxide	AA
R770	VRS-CY1JF103FY	J	10k	1/16W	Metal Oxide	AA
R771	VRS-CY1JF124FY	J	120k	1/16W	Metal Oxide	AA
R772	VRS-CY1JF223FY	J	22k	1/16W	Metal Oxide	AA
R774	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R775	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R801	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R803	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
R804	VRS-CY1JF473JY	J	47k	1/16W	Metal Oxide	AA
R806	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R807	VRS-CY1JF473JY	J	47k	1/16W	Metal Oxide	AA
R808	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R809	VRS-CY1JF331JY	J	330	1/16W	Metal Oxide	AA
R810	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R811	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
R812	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
R814	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R815	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R818	VRS-CY1JF681JY	J	680	1/16W	Metal Oxide	AA
R819	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R822	VRS-CY1JF681JY	J	680	1/16W	Metal Oxide	AA
R823	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R824	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R826	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R830	VRS-CY1JF681JY	J	680	1/16W	Metal Oxide	AA
R831	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R832	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R833	VRS-CK1JF470JY	J	47	1/16W	Metal Oxide	AB
R835	VRS-CK1JF470JY	J	47	1/16W	Metal Oxide	AB
R836	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R837	VRS-CK1JF470JY	J	47	1/16W	Metal Oxide	AB
R839	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R841	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R843	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R844	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R845	VRS-CY1JF821FY	J	820	1/16W	Metal Oxide	AA
R846	VRS-CY1JF102FY	J	1k	1/16W	Metal Oxide	AA
R847	VRS-CY1JF182FY	J	1.8k	1/16W	Metal Oxide	AA
R848	VRS-CJ1JF100JY	J	10	1/16W	Metal Oxide	AA
R850	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
R851	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
R852	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
R855	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R860	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R861	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R862	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R863	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R867	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R868	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R869	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R873	VRS-CH1JF103JY	J	10k	1/16W	Metal Oxide	AA
R874	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R882	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
R883	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
R1202	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R1203	RR-TZ0073CEZZY	J	33	1/16W	Metal Oxide	AA
R1204	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R1205	VRS-TW2HF102JY	J	1k	1/2W	Metal Oxide	AA
R1207	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R1301	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
R1302	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R1304	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R1305	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R1309	VRS-CY1JF392JY	J	3.9k	1/16W	Metal Oxide	AA
R1310	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R1311	VRS-CY1JF392JY	J	3.9k	1/16W	Metal Oxide	AA
R1312	VRS-TQ2BD470JY	J	47	1/8W	Metal Oxide	AA
R1313	VRS-TQ2BD330JY	J	33	1/8W	Metal Oxide	AA
R1314	VRS-TQ2BD470JY	J	47	1/8W	Metal Oxide	AA
R1315	VRS-TQ2BD330JY	J	33	1/8W	Metal Oxide	AA
R1317	VRS-CY1JF471JY	J	470	1/16W	Metal Oxide	AA
R1319	VRS-CY1JF471JY	J	470	1/16W	Metal Oxide	AA
R2001	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2002	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R2003	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA

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MAIN Unit (Continued)

Ref. No.	Part No.	★			Description	Code
R2005	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2006	VRS-CY1JF1R0JY	J	1	1/16W	Metal Oxide	AA
R2007	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2008	VRS-CY1JF102FY	J	1k	1/16W	Metal Oxide	AA
R2009	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R2010	VRS-CY1JF623FY	J	62k	1/16W	Metal Oxide	AA
R2011	VRS-CY1JF433FY	J	43k	1/16W	Metal Oxide	AA
R2012	VRS-CY1JF103FY	J	10k	1/16W	Metal Oxide	AA
R2013	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2015	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2016	VRS-CY1JF473FY	J	47k	1/16W	Metal Oxide	AA
R2017	VRS-CJ1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2018	VRS-CJ1JF102JY	J	1k	1/16W	Metal Oxide	AA
R2019	VRS-CY1JF823FY	J	82k	1/16W	Metal Oxide	AA
R2020	VRS-CY1JF154FY	J	150k	1/16W	Metal Oxide	AA
R2021	VRS-CY1JF274JY	J	270k	1/16W	Metal Oxide	AA
R2022	VRS-CY1JF823FY	J	82k	1/16W	Metal Oxide	AA
R2024	VRS-CY1JF823JY	J	82k	1/16W	Metal Oxide	AA
R2028	VRS-CY1JF154FY	J	150k	1/16W	Metal Oxide	AA
R2029	VRS-CY1JF473JY	J	47k	1/16W	Metal Oxide	AA
R2030	VRS-CJ1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2033	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2034	VRS-CY1JF153JY	J	15k	1/16W	Metal Oxide	AA
R2035	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2036	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2037	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2038	VRS-CH1JF101JY	J	100	1/16W	Metal Oxide	AA
R2039	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2040	VRS-CJ1JF000JY	J	0	1/16W	Metal Oxide	AA
R2041	VRS-CY1JF512JY	J	5.1k	1/16W	Metal Oxide	AA
R2043	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R2044	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2045	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R2046	VRS-CY1JF680JY	J	68	1/16W	Metal Oxide	AA
R2047	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2048	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2050	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2052	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2053	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2054	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2055	VRS-TV2BDR18JY	J	0.18	1/8W	Metal Oxide	AA
R2056	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2058	VRS-CJ1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R2059	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R2060	VRS-TV2BDR18JY	J	0.18	1/8W	Metal Oxide	AA
R2061	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2062	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2063	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2064	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2066	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2068	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2069	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R2070	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2071	VRS-CJ1JF392JY	J	3.9k	1/16W	Metal Oxide	AA
R2072	VRS-CH1JF680JY	J	68	1/16W	Metal Oxide	AA
R2073	VRS-CH1JF101JY	J	100	1/16W	Metal Oxide	AA
R2074	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2076	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2077	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2078	VRS-CJ1JF000JY	J	0	1/16W	Metal Oxide	AA
R2081	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2082	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R2084	VRS-CY1JF391JY	J	390	1/16W	Metal Oxide	AA
R2085	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2088	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2089	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R2090	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R2091	VRS-CJ1JF470JY	J	47	1/16W	Metal Oxide	AA
R2092	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R2109	VRS-CH1JF473JY	J	47k	1/16W	Metal Oxide	AA
R2110	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R2111	VRS-CY1JF473JY	J	47k	1/16W	Metal Oxide	AA
R8702	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R8703	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R8704	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R8705	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R8708	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R8709	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R8710	VRS-CY1JF681JY	J	680	1/16W	Metal Oxide	AA
R8711	VRS-CY1JF391FY	J	390	1/16W	Metal Oxide	AA
R8712	VRS-CY1JF681JY	J	680	1/16W	Metal Oxide	AA
R8713	VRS-CY1JF821FY	J	820	1/16W	Metal Oxide	AA
R8714	VRS-CY1JF681JY	J	680	1/16W	Metal Oxide	AA
R8715	VRS-CJ1JF220JY	J	22	1/16W	Metal Oxide	AA
R8716	VRS-CY1JF102FY	J	1k	1/16W	Metal Oxide	AA
R8717	VRS-CY1JF182FY	J	1.8k	1/16W	Metal Oxide	AA
R8718	VRS-CY1JF680JY	J	68	1/16W	Metal Oxide	AA
R8719	VRS-CY1JF680JY	J	68	1/16W	Metal Oxide	AA
R8720	VRS-CY1JF680JY	J	68	1/16W	Metal Oxide	AA
R8721	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
R8722	VRS-CY1JF271JY	J	270	1/16W	Metal Oxide	AA
R8723	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
R8724	VRS-CY1JF680JY	J	68	1/16W	Metal Oxide	AA
R8725	VRS-CY1JF470JY	J	47	1/16W	Metal Oxide	AA
R8726	VRS-CY1JF680JY	J	68	1/16W	Metal Oxide	AA
R8727	VRS-CY1JF680JY	J	68	1/16W	Metal Oxide	AA
R8729	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R8730	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R8731	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R8732	VRS-CY1JF151JY	J	150	1/16W	Metal Oxide	AA
R8733	VRS-CJ1JF220JY	J	22	1/16W	Metal Oxide	AA
R8734	VRS-CY1JF151JY	J	150	1/16W	Metal Oxide	AA
R8735	VRS-CY1JF220JY	J	22	1/16W	Metal Oxide	AA
R8736	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R8738	VRS-CK1JF330JY	J	33	1/16W	Metal Oxide	AB
R8739	VRS-CK1JF330JY	J	33	1/16W	Metal Oxide	AB
R8740	VRS-CK1JF330JY	J	33	1/16W	Metal Oxide	AB
R8742	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R8743	VRS-CJ1JF103JY	J	10k	1/16W	Metal Oxide	AA
R8744	VRS-CY1JF3R9JY	J	3.9	1/16W	Metal Oxide	AA
R8745	VRS-CY1JF3R9JY	J	3.9	1/16W	Metal Oxide	AA
R8746	VRS-CY1JF3R9JY	J	3.9	1/16W	Metal Oxide	AA
R8747	VRS-CY1JF3R9JY	J	3.9	1/16W	Metal Oxide	AA
R8748	VRS-CY1JF3R9JY	J	3.9	1/16W	Metal Oxide	AA
R8749	VRS-CY1JF3R9JY	J	3.9	1/16W	Metal Oxide	AA
R8750	VRS-CY1JF3R9JY	J	3.9	1/16W	Metal Oxide	AA
R8751	VRS-CY1JF3R9JY	J	3.9	1/16W	Metal Oxide	AA
R8752	VRS-CJ1JF101JY	J	100	1/16W	Metal Oxide	AA
R8753	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

SC401	QSOCNA101WJZZ	J	HDMI(INPUT4)	AF
SC402	QSOCZA117WJZZQ	J	ANALOG RGB(INPUT5)	AK
SC5201	QCNCMA036WJZZY	J	Connector, 26-pin	AE
SC5202	QCNCMA036WJZZY	J	Connector, 26-pin	AE
SC5203	QCNCMA036WJZZY	J	Connector, 26-pin	AE
SC5204	QCNCWA502WJPZY	J	Connector, 13-pin	AD

PACKAGED CIRCUITS

X801	RCRSCA097WJZZY	J	Crystal, 54MHz	AG
X1301	RCRSB0250GEZZ	J	Crystal, 18.432MHz	AG
X2001	RCRSC0032TAZZY	J	Crystal, 32.768kHz	AG
X8701	RCRSC0170TAZZY	J	Crystal, 14.318MHz	AG

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CAPACITORS

Ref. No.	Part No.	★				Description	Code
C3301	VCESYA1CM107M+	J	100	16V		Electrolytic	AB
C3302	VCKYCY1HB102KY	J	1000p	50V		Ceramic	AA
C3303	VCKYCY1HB102KY	J	1000p	50V		Ceramic	AA
C3304	VCESYA1HM106M+	J	10	50V		Electrolytic	AB
C3305	VCESYA1HM106M+	J	10	50V		Electrolytic	AB
C3306	VCKYTV1CB105KY	J	1	16V		Ceramic	AC
C3307	RC-EZA216WJZZ	J	1000	16V		Electrolytic	AD
C3308	RC-EZA216WJZZ	J	1000	16V		Electrolytic	AD
C3309	RC-EZA216WJZZ	J	1000	16V		Electrolytic	AD
C3310	VCKYCY1AB105KY	J	1	10V		Ceramic	AB
C3311	VCKYCY1AB105KY	J	1	10V		Ceramic	AB
C3312	RC-KZA030WJZZY	J	2.2	10V		Ceramic	AB
C3313	RC-KZA030WJZZY	J	2.2	10V		Ceramic	AB
C3314	VCKYCY1HB153KY	J	0.015	50V		Ceramic	AA
C3315	VCKYCY1HB153KY	J	0.015	50V		Ceramic	AA
C3317	RC-KZA030WJZZY	J	2.2	10V		Ceramic	AB
C3401	VCKYCY1AB105KY	J	1	10V		Ceramic	AB
C3402	VCESYA1HM106M+	J	10	50V		Electrolytic	AB
C3403	VCKYCY1EF104ZY	J	0.1	25V		Ceramic	AA
C3405	VCKYCY1AB105KY	J	1	10V		Ceramic	AB
C3406	VCKYCY1AB105KY	J	1	10V		Ceramic	AB
C3407	VCKYCY1AB105KY	J	1	10V		Ceramic	AB
C3408	VCKYCY1AB105KY	J	1	10V		Ceramic	AB
C3409	VCESYA1HM106M+	J	10	50V		Electrolytic	AB
C3410	RC-KZA030WJZZY	J	2.2	10V		Ceramic	AB
C3411	RC-KZA030WJZZY	J	2.2	10V		Ceramic	AB
C3412	RC-KZA176WJZZY	J	10	10V		Ceramic	AC
C3414	RC-KZA176WJZZY	J	10	10V		Ceramic	AC
C3416	RC-KZA176WJZZY	J	10	10V		Ceramic	AC
C3420	VCKYCY1EF104ZY	J	0.1	25V		Ceramic	AA
C3422	RC-KZA176WJZZY	J	10	10V		Ceramic	AC
C3423	RC-KZA176WJZZY	J	10	10V		Ceramic	AC
C3425	VCKYCY1EF104ZY	J	0.1	25V		Ceramic	AA
C3427	RC-KZA176WJZZY	J	10	10V		Ceramic	AC
C3428	VCKYCY1EF104ZY	J	0.1	25V		Ceramic	AA
C3429	VCESYA1CM477M+	J	470	16V		Electrolytic	AE
C3440	VCKYCY1HB102KY	J	1000p	50V		Ceramic	AA
C3441	VCCCCY1HH330JY	J	33p	50V		Ceramic	AA
C3442	VCCCCY1HH330JY	J	33p	50V		Ceramic	AA
C3443	VCKYCY1EF104ZY	J	0.1	25V		Ceramic	AA
C3444	RC-KZA176WJZZY	J	10	10V		Ceramic	AC
C3446	RC-KZA176WJZZY	J	10	10V		Ceramic	AC
C3448	RC-KZA176WJZZY	J	10	10V		Ceramic	AC
C3455	VCKYCY1HF103ZY	J	0.01	50V		Ceramic	AA
C3456	VCKYCY1EF104ZY	J	0.1	25V		Ceramic	AA
C3502	VCESYA1CM107M+	J	100	16V		Electrolytic	AB
C3503	VCKYCY1AB105KY	J	1	10V		Ceramic	AB
C5001	RC-EZA559WJZZ	J	0.33F	5.5V		Electrolytic	AF
C7039	RC-KZA113WJZZY	J	4.7	16V		Ceramic	AB
C7040	VCKYTV1CB105KY	J	1	16V		Ceramic	AC
C7043	RC-KZA109WJZZY	J	10	16V		Ceramic	AC
⚠ C7701	RC-FZA022WJZZ	J	0.22	275V		Film	AD
⚠ C7702	RC-FZA022WJZZ	J	0.22	275V		Film	AD
⚠ C7703	RC-EZA733WJQZ	J	220	420V		Electrolytic	AR
C7704	RC-FZA162WJZZ	J	0.1	580V		Film	AF
⚠ C7707	RC-KZ0103GEZZ	J	1000p	250V		Ceramic	AD
⚠ C7708	RC-KZ0103GEZZ	J	1000p	250V		Ceramic	AD
C7711	RC-KZA273WJZZ	J	680p	250V		Ceramic	AD
C7712	RC-KZA216WJZZY	J	2.2	50V		Ceramic	AC
C7713	VCKYCY1HB471KY	J	470p	50V		Ceramic	AA
C7714	VCQYTA1HM104J+	J	0.1	50V		Mylar	AB
C7715	VCEA4A2CN106M+	J	10	160V		Electrolytic	AC
C7716	VCESKA1HM476M+	J	47	50V		Electrolytic	AD
C7717	VCQYTA1HM332J+	J	3300p	50V		Mylar	AA
C7733	VCKYCY1HB332KY	J	3300p	50V		Ceramic	AA
C7734	RC-EZA503WJZZ	J	1800	25V		Electrolytic	AL
C7735	RC-EZA468WJZZ	J	2200	16V		Electrolytic	AE
C7736	RC-EZA503WJZZ	J	1800	25V		Electrolytic	AL
C7737	RC-EZA162WJZZ	J	1000	16V		Electrolytic	AD
C7739	RC-EZA499WJZZ	J	330	25V		Electrolytic	AH
C7752	RC-EZA499WJZZ	J	330	25V		Electrolytic	AH
C7753	RC-EZA499WJZZ	J	330	25V		Electrolytic	AH
⚠ C7758	RC-KZ0104GEZZ	J	1500p	250V		Ceramic	AG
⚠ C7759	RC-KZ0103GEZZ	J	1000p	250V		Ceramic	AD

MISCELLANEOUS PARTS

Ref. No.	Part No.	★		Description	Code
⚠ CN7701	QSOCAA003WJZZ	J	AC INPUT Terminal		AD

DIODES

Ref. No.	Part No.	★		Description	Code
D3301	VHD1PS184++-1Y	J	Diode		AB
D3302	RH-EX0262TAZZY	J	Zener Diode, 7.5V		AB
D3424	VHD1PS184++-1Y	J	Diode		AB
D4051	RH-EX0267TAZZY	J	Zener Diode, 12V		AB
D4052	RH-EX0267TAZZY	J	Zener Diode, 12V		AB
D4053	RH-EX0271TAZZY	J	Zener Diode, 18V		AB
D5001	VHDRB491D++-1Y	J	Diode		AD
⚠ D7701	RH-DXA068WJZZS	J	Zener Diode		AE
D7702	RH-DXA070WJZZY	J	Zener Diode		AE
D7703	RH-DX0490CEZZY	J	Zener Diode		AC
D7704	RH-DX0490CEZZY	J	Zener Diode		AC
D7705	VHDBAS316//-1Y	J	Diode		AB
D7706	RH-DXA070WJZZY	J	Zener Diode		AE
D7711	RH-DX0066GEZZY	J	Zener Diode		AC
D7712	VHD1SS244//-1Y	J	Diode		AB
D7713	RH-EX0640GEZZY	J	Zener Diode, 12V		AA
D7714	VHD1SS244//-1Y	J	Diode		AB
D7715	RH-EX0618GEZZY	J	Zener Diode, 6.2V		AB
D7716	VHD1SS244//-1Y	J	Diode		AB
D7717	VHD1SS244//-1Y	J	Diode		AB
D7718	RH-EX0664GEZZY	J	Zener Diode, 24V		AB
D7732	RH-DXA090WJZZ	J	Zener Diode		AH
D7733	VHDSF30SC6+-1	J	Diode		AH

MISCELLANEOUS PARTS

Ref. No.	Part No.	★		Description	Code
⚠ F7701	QFS-C3225CEZZ	J	Fuse, 3.15A/250V		AC
⚠ F7702	QFS-ZA014WJZZ	J	Fuse, 5A/250V		AD
FH7701	QFSHD1014CEZZ+	J	Fuse Holder		AC
FH7702	QFSHD1013CEZZ+	J	Fuse Holder		AC
HM7701	LX-GZ3002PEZZ	J	Screw		AB
HM7702	LX-GZ3002PEZZ	J	Screw		AB
HM7706	LX-GZ3002PEZZ	J	Screw		AB
HM7707	LX-GZ3002PEZZ	J	Screw		AB
HM7709	LX-GZ3002PEZZ	J	Screw		AB
HM7712	LX-GZ3002PEZZ	J	Screw		AB
HM7715	LX-GZ3002PEZZ	J	Screw		AB
HM7716	LX-GZ3002PEZZ	J	Screw		AB
HM7717	LX-GZ3001PEZZ	J	Screw		AB
HM7718	LX-GZ3001PEZZ	J	Screw		AB
HM7719	LX-GZ3001PEZZ	J	Screw		AB
HM7720	LX-GZ3001PEZZ	J	Screw		AB
HM7721	LX-GZ3002PEZZ	J	Screw		AB
HM7722	LX-GZ3002PEZZ	J	Screw		AB
HM7723	LX-GZ3002PEZZ	J	Screw		AB
HM7724	LX-GZ3002PEZZ	J	Screw		AB
HM7725	LX-GZ3002PEZZ	J	Screw		AB
HM7726	LX-GZ3002PEZZ	J	Screw		AB
HM7738	LX-GZ3001PEZZ	J	Screw		AB
HM7739	LX-GZ3001PEZZ	J	Screw		AB
HM7740	LX-GZ3001PEZZ	J	Screw		AB
HM7741	LX-GZ3001PEZZ	J	Screw		AB
HM7742	LX-GZ3001PEZZ	J	Screw		AB
HM7743	LX-GZ3001PEZZ	J	Screw		AB
HM7744	LX-GZ3001PEZZ	J	Screw		AB
HM7745	LX-GZ3001PEZZ	J	Screw		AB
HM7746	LX-GZ3001PEZZ	J	Screw		AB
HM7747	LX-GZ3001PEZZ	J	Screw		AB
HM7748	LX-GZ3001PEZZ	J	Screw		AB
HM7749	LX-GZ3001PEZZ	J	Screw		AB
HM7750	LX-GZ3001PEZZ	J	Screw		AB
HM7751	LX-GZ3001PEZZ	J	Screw		AB
HM7752	LX-GZ3001PEZZ	J	Screw		AB

INTEGRATED CIRCUITS

Ref. No.	Part No.	★		Description	Code
IC3301	VHiLA4635A+-1S	J	LA4635A-E		AM

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SUB Unit (Continued)

Ref. No.	Part No.	★	Description	Code
IC3401	VHiTC4053BF1EY	J	TC4053BF(ELN,F)	AF
IC3402	VHiNJM2246M-1Y	J	NJM2246M(TE1)	AF
IC6700	VHiKiA431//-1+	J	KIA431	AE
IC7004	VHiPQ200WNA-1Y	J	PQ200WNA1ZPH	AG
⚠ IC7702	RH-FXA003WJZZ	J	PC123Y82	AD
⚠ IC7703	RH-FXA003WJZZ	J	PC123Y82	AD
IC7704	VHiSE012N//-1	J	SE012N	AH
IC7705	VHiSTRX6768-1	J	STR-X6768N	AQ

MISCELLANEOUS PARTS

J3402	QJAKLA010WJZZ	J	AUDIO(L/R)/VIDEO	AF
J3404	QJAKFA042WJZZ	J	AUDIO(L/R)	AD
J3405	QJAKGA082WJZZ	J	Y/PB/PR	AC
J3406	QTANZA033WJZZ	J	S-VIDEO/AUDIO	AH

COILS

L3401	VPCNN220J2R9NY	J	Peaking 22µH	AB
⚠ L7701	RCiLFA175WJZZ	J	Coil	AH
⚠ L7702	RCiLFA175WJZZ	J	Coil	AH
L7731	RCiLPA476WJZZ+	J	Coil	AC
L7732	RCiLP0184CEZZ+	J	Coil	AD

MISCELLANEOUS PARTS

LUG3401	QLUGHA010WJZZ	J	Lug	AC
LUG3402	QLUGHA010WJZZ	J	Lug	AC
LUG3403	QLUGHA010WJZZ	J	Lug	AC
P5001	QPLGN0478GEZZ	J	Plug, 4-pin	AB
P5002	QCNCWA089WJZZ	J	Connector, 26-pin	AG
P5003	QCNCWA089WJZZ	J	Connector, 26-pin	AG
P5004	QCNCWA089WJZZ	J	Connector, 26-pin	AG
P7703	QPLGN1478GEZZ	J	Plug	AC

TRANSISTORS

Q3301	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3302	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3304	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3401	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3402	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3403	VSKRA104S//-1Y	J	KRA104S	AA
Q3404	VSKRC104S//-1Y	J	KRC104S	AA
Q3405	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3407	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3408	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3409	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3410	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3411	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3412	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3414	VSiMZ1A////-1Y	J	IMZ1A	AC
Q3416	VSUPA606T//-1Y	J	UPA606T	AD
Q6703	VS2SA673AC/1E+	J	2SA673AC	AC
Q7701	VS2SA1013//1E+	J	2SA1013	AD
Q7702	VSKRC104S//-1Y	J	KRC104S	AA
Q7703	VS2SA1530AR-1Y	J	2SA1530AR	AB
Q7751	VSKRC104S//-1Y	J	KRC104S	AA

RESISTORS

R3301	VRS-CY1JF122JY	J	1.2k	1/16W	Metal Oxide	AA
R3302	VRS-CY1JF332JY	J	3.3k	1/16W	Metal Oxide	AA
R3303	VRS-CY1JF332JY	J	3.3k	1/16W	Metal Oxide	AA
R3304	VRS-CY1JF222JY	J	2.2k	1/16W	Metal Oxide	AA
R3305	VRS-CY1JF222JY	J	2.2k	1/16W	Metal Oxide	AA
R3306	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3308	VRS-CY1JF123JY	J	12k	1/16W	Metal Oxide	AA
R3310	VRS-CY1JF392JY	J	3.9k	1/16W	Metal Oxide	AA
R3311	VRS-CY1JF392JY	J	3.9k	1/16W	Metal Oxide	AA
R3312	VRS-CY1JF183JY	J	18k	1/16W	Metal Oxide	AA
R3313	VRS-CY1JF822JY	J	8.2k	1/16W	Metal Oxide	AA
R3314	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3401	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3402	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3403	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3404	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3405	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3406	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3407	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3408	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3409	VRD-RA2BE000JY	J	0	1/8W	Carbon	AA
R3410	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3411	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3412	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3413	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3414	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3415	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3416	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3418	VRS-CY1JF471JY	J	470	1/16W	Metal Oxide	AA
R3419	VRS-CY1JF471JY	J	470	1/16W	Metal Oxide	AA
R3420	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3422	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3423	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3424	VRS-CY1JF562JY	J	5.6k	1/16W	Metal Oxide	AA
R3426	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3427	VRS-CY1JF153JY	J	15k	1/16W	Metal Oxide	AA
R3430	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R3432	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3434	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3436	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R3437	VRS-CY1JF153JY	J	15k	1/16W	Metal Oxide	AA
R3439	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3441	VRS-TQ2BD681JY	J	680	1/8W	Metal Oxide	AA
R3442	VRS-TQ2BD681JY	J	680	1/8W	Metal Oxide	AA
R3443	VRS-TQ2BD681JY	J	680	1/8W	Metal Oxide	AA
R3444	VRS-TQ2BD750JY	J	75	1/8W	Metal Oxide	AA
R3445	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3446	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3447	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3448	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3449	VRS-CY1JF100JY	J	10	1/16W	Metal Oxide	AA
R3450	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3451	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R3452	VRS-TQ2BD221JY	J	220	1/8W	Metal Oxide	AA
R3453	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R3458	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3459	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R3460	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3465	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3467	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R3468	VRS-CY1JF331JY	J	330	1/16W	Metal Oxide	AA
R3469	VRS-CY1JF331JY	J	330	1/16W	Metal Oxide	AA
R3476	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
R3478	VRS-CY1JF332JY	J	3.3k	1/16W	Metal Oxide	AA
R3479	VRS-CY1JF152JY	J	1.5k	1/16W	Metal Oxide	AA
R3480	VRS-CY1JF331JY	J	330	1/16W	Metal Oxide	AA
R3481	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R3483	VRS-CY1JF152JY	J	1.5k	1/16W	Metal Oxide	AA
R3485	VRS-CY1JF561FY	J	560	1/16W	Metal Oxide	AA
R3487	VRS-CY1JF102FY	J	1k	1/16W	Metal Oxide	AA
R3488	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R3538	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3539	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3540	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3541	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
R3542	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
R3543	VRS-CY1JF105JY	J	1M	1/16W	Metal Oxide	AA
R3545	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3546	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R3547	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R3548	VRS-CY1JF104JY	J	100k	1/16W	Metal Oxide	AA
R4051	VRS-CY1JF682JY	J	6.8k	1/16W	Metal Oxide	AA
R4052	VRS-CY1JF682JY	J	6.8k	1/16W	Metal Oxide	AA
R4053	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R4054	VRS-CY1JF472JY	J	4.7k	1/16W	Metal Oxide	AA
R4055	VRS-CY1JF274JY	J	270k	1/16W	Metal Oxide	AA
R4056	VRS-CY1JF823JY	J	82k	1/16W	Metal Oxide	AA
R5001	VRD-RM2HD101JY	J	100	1/2W	Carbon	AA
R5010	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA

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SUB Unit (Continued)

Ref. No.	Part No.	★			Description	Code
R6705	VRS-TQ2BD103JY	J	10k	1/8W	Metal Oxide	AA
R6706	VRD-RA2BE102JY	J	1k	1/8W	Carbon	AA
R6718	VRD-RA2BE223JY	J	22k	1/8W	Carbon	AA
R6719	VRS-CY1JF121JY	J	120	1/16W	Metal Oxide	AA
R6720	VRS-CY1JF222JY	J	2.2k	1/16W	Metal Oxide	AA
R6721	VRS-VV3LB122J	J	1.2k	3.0W	Metal Oxide	AB
R6729	VRS-VV3LB122J	J	1.2k	3.0W	Metal Oxide	AB
R6730	VRS-VV3LB122J	J	1.2k	3.0W	Metal Oxide	AB
R7001	VRS-CY1JF392FY	J	3.9k	1/16W	Metal Oxide	AA
R7046	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R7048	VRS-CY1JF182FY	J	1.8k	1/16W	Metal Oxide	AA
R7703	VRS-CY1JF563JY	J	56k	1/16W	Metal Oxide	AA
R7704	VRS-VV3LB104J	J	100k	3.0W	Metal Oxide	AB
R7705	VRS-VV3LB220J	J	22	3.0W	Metal Oxide	AB
R7706	RR-DZA036WJZZ	J	15k	2W	Special Carbon film	AC
R7709	VRS-TQ2BD222JY	J	2.2k	1/8W	Metal Oxide	AA
R7710	VRS-CY1JF223JY	J	22k	1/16W	Metal Oxide	AA
R7713	VRS-SV2HC101J	J	100	1/2W	Metal Oxide	AA
R7714	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
R7715	VRD-RA2BE102JY	J	1k	1/8W	Carbon	AA
R7716	VRD-RM2HD220JY	J	22	1/2W	Carbon	AA
R7717	VRS-TQ2BD102JY	J	1k	1/8W	Metal Oxide	AA
R7718	VRS-TQ2BD562JY	J	5.6k	1/8W	Metal Oxide	AA
R7719	VRD-RM2HD220JY	J	22	1/2W	Carbon	AA
R7720	VRS-TQ2BD222JY	J	2.2k	1/8W	Metal Oxide	AA
R7723	VRS-CY1JF182JY	J	1.8k	1/16W	Metal Oxide	AA
R7724	RR-HZ0048CEZZY	J	3.9M	1/2W	Coat-insulated fixed anti-surge	AB
R7725	VRS-TQ2BD153JY	J	15k	1/8W	Metal Oxide	AA
R7726	VRS-CY1JF563JY	J	56k	1/16W	Metal Oxide	AA
R7729	RR-HZ0048CEZZY	J	3.9M	1/2W	Coat-insulated fixed anti-surge	AB
R7732	VRD-RA2BE000JY	J	0	1/8W	Carbon	AA
R7736	VRN-VV3DBR68J	J	0.68	2W	Metal Film	AA
R7737	VRN-VV3DBR39J	J	0.39	2W	Metal Film	AA
R7752	VRS-CY1JF102JY	J	1k	1/16W	Metal Oxide	AA
R7755	VRS-CY1JF103JY	J	10k	1/16W	Metal Oxide	AA
R7757	VRS-TV1JD272JY	J	2.7k	1/10W	Metal Oxide	AA
R7758	VRD-RA2BE000JY	J	0	1/8W	Carbon	AA
R7759	VRS-TW2HF102JY	J	1k	1/2W	Metal Oxide	AA
R7761	VRD-RA2BE2R7JY	J	2.7	1/8W	Carbon	AA
R7767	VRD-RA2EE153JY	J	15k	1/4W	Carbon	AA

MISCELLANEOUS PARTS

RDA7701	PRDARA310WJFW	J	Heat Sink			AL
RDA7702	PRDARA311WJFW	J	Heat Sink			AL
RJ11	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ12	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ13	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ14	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ15	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ16	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ17	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ18	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ19	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ20	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ21	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ22	VRS-TQ2BD000JY	J	0	1/8W	Metal Oxide	AA
RJ101	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
RJ102	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
RJ103	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
RJ104	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
RJ105	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
RJ106	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
RJ107	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
RJ108	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
RJ109	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
RJ120	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
RJ200	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
RJ201	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code

SWITCHES

S4051	QSW-K0095CEZZ	J	CH(∨)	AB
S4052	QSW-K0095CEZZ	J	MENU	AB
S4053	QSW-K0095CEZZ	J	CH(∧)	AB
S4054	QSW-K0095CEZZ	J	VOL(+)	AB
S4055	QSW-K0095CEZZ	J	INPUT	AB
S4056	QSW-K0095CEZZ	J	VOL(–)	AB
S4057	QSW-K0095CEZZ	J	POWER	AB

SPARK GAP

SG7703	QSPGCA003WJZZ	J	Spark Gap	AH

TRANSFORMER

T7701	RTRNWA234WJZZ	J	Transformer	AQ

THERMISTOR

TH7701	RH-HXA019WJZZ	J	Thermistor	AE

TUNER

NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

TU3401	VTU115VUA05AH	J	Tuner	AZ

VARISTOR

VA7701	RH-VXA022WJZZ	J	Varistor	AD
VA7702	RH-VXA018WJN1	J	Varistor	AD

MISCELLANEOUS PARTS

	XBPS730P10JS0	J	Screw, x4	AA
	LANGTA199WJFW	J	AC INLET Angle	AE
	LX-BZ3266CEFH	J	Screw, x3	AB

Ref. No.	Part No.	★	Description	Code

DUNTKD676FM03
R/C, LED Unit

CAPACITORS

C4000	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C4001	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C4003	RC-KZA069WJZZY	J	4.7	10V	Ceramic	AB

DIODES

D4000	RH-PX0421CEZZY	J	POWER/WAKE UP TIMER Indicator	AD
D4001	RH-PX0421CEZZY	J	OPC Indicator	AD
D4006	RH-EX0259TAZZY	X	Zener Diode, 5.6V	AB

INTEGRATED CIRCUITS

IC4000	VHiMM1616++-1Y	J	MM1616XBRE	AF

MISCELLANEOUS PARTS

J4000	QJAKJA014WJZZ	J	Headphone Jack	AD

TRANSISTORS

Q4000	VSKRC104S//-1Y	J	KRC104S	AA
Q4001	VSKRC104S//-1Y	J	KRC104S	AA
Q4002	VSKRC104S//-1Y	J	KRC104S	AA

RESISTORS

R4000	VRS-CY1JF331JY	J	330	1/16W	Metal Oxide	AA
R4001	VRS-CY1JF182JY	J	1.8k	1/16W	Metal Oxide	AA
R4002	VRS-CY1JF331JY	J	330	1/16W	Metal Oxide	AA
R4006	VRS-CY1JF101JY	J	100	1/16W	Metal Oxide	AA
R4010	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R4011	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA
R4012	VRS-CY1JF000JY	J	0	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

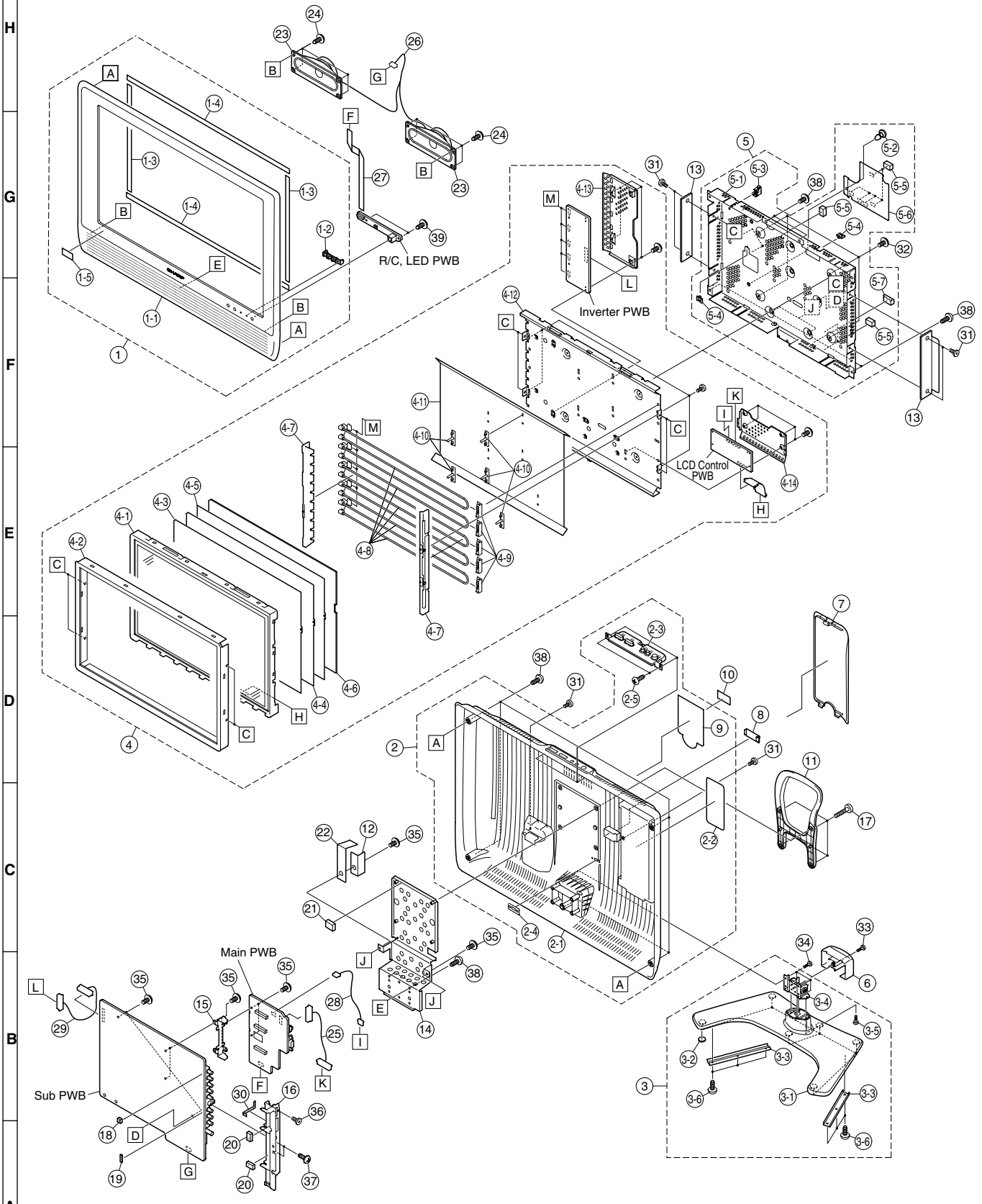
RMC4000	RRMCUA034WJQZ	J	R/C Receiver	AE
SC4000	QSOCNA523WJPZ	J	Socket, 13-pin	AD

Ref. No.	Part No.	★	Description	Code

CABINET AND MECHANICAL PARTS

1	CCABAB255WJ01	X	Cabinet A Ass'y	BL
1-1	*Not Available*	–	Cabinet A	—
1-2	HDECQA474WJSA	J	R/C,LED Cover	AE
1-3	PSPAHA781WJZZ	X	Mask Spacer(S), x2	
1-4	PSPAHA782WJZZ	X	Mask Spacer(L), x2	
1-5	TLABZA635WJZZ	J	"EnergyStar" Label	AC
2	CCABBA720WJ01	X	Cabinet B Ass'y	BH
2-1	*Not Available*	–	Cabinet B	—
2-2	HiNDPB590WJSA	X	Terminal Indication Label	
2-3	JBTN-A532WJKA	X	Operation Button	
2-4	LANGFA085WJFW	J	Kensington Angle	AC
2-5	XEBSN30P10000	J	Screw, x2	AA
3	CDAi-A249WJ01	X	Stand Ass'y	BD
3-1	GDAi-A249WJKA	X	Stand, Base	
3-2	GLEGGA051WJZZ	J	Foot, x7	AB
3-3	LANGHA004WJFW	J	Reinforcement Angle, x2	AE
3-4	MHNG-A134WJFW	X	Tilt Hinge	AX
3-5	XBBS940P16000	J	Screw, x4	AB
3-6	XEBS940P08000	J	Screw, x6	AB
4	R1LK200T3LZ10Y	J	20" LCD Panel Module	DZ
4-1	*Not Available*	–	20" LCD Panel	—
4-2	LANGK3451TPZZ	J	Bezel	AW
4-3	PSLDK2600TPZZ	J	Diffusion Sheet (Top)	AQ
4-4	POFMA0258TPZZ	J	Lens Sheet	BA
4-5	PSLDK2599TPZZ	J	Diffusion Sheet (Bottom)	AP
4-6	PSLDK2598TPZZ	J	Diffusion Plate	AW
4-7	LHLDZ3190TPZZ	J	Lamp Holder, x2	AK
⚠ 4-8	RLMPC2402TPZZ	J	Lamp Unit, x5	AY
4-9	LHLDZ3227TPZZ	J	Holder, x5	AE
4-10	LHLDZ3192TPZZ	J	Lamp Clip, x5	AC
4-11	PREFL2368TPZZ	J	Reflection Sheet	AP
4-12	LANGK3448TPZZ	J	Backlight Angle	AX
4-13	LANGK3450TPZZ	J	Inverter Unit Angle	AL
4-14	LANGK3449TPZZ	J	LCD Control Unit Angle	AH
5	*Not Available*	–	Panel Angle Ass'y	—
5-1	LANGTA279WJFW	X	Panel Angle	AX
5-2	LHLDFA011WJKZ	J	PWB Holder, x1	AC
5-3	LHLDW1008GEZZ	J	Wire Holder, x1	AA
5-4	LHLDW1220CEZZ	J	Wire Holder, x2	AD
5-5	PSPAGA196WJZZ	J	PWB Spacer, x9	AC
5-6	PZETKA180WJKZ	X	Insulating Sheet	AK
5-7	LHLDWA045WJZZ	J	Wire Holder, x1	AD
6	GCOVAB082WJKF	X	Stand Cover	AN
7	GCOVAB491WJKA	X	Terminal Cover	AU
8	GCOVAB542WJKA	X	Bass-Cone Cover	AU
9	HiNDPB591WJSA	X	Model Label	AH
10	*Not Available*	–	Serial No. Label	—
11	JHNDPA017WJKA	J	Stand Handle	AL
12	LANGFA289WJFW	X	PWB Support Angle, x1	AB
13	LANGFA290WJFW	X	Panel Support Angle, x2	AE
14	LANGTA280WJFW	X	VESA Angle	AT
15	LANGTA281WJFW	X	PWB Fixing Angle	AD
16	LCHSMA285WJKA	X	Chassis Frame	AM
17	LX-BZ3442CEF9	J	Screw, x4	AB
18	PSLDMA964WJPZ	X	Gasket	AC
19	PSLDMA968WJPZ	X	Gasket	AC
20	PSLDMA969WJPZ	X	Gasket, x2	AC
21	PSPAGA325WJZZ	X	Spacer, x1	AE
22	PZETKA190WJZZ	X	Insulating Sheet	AD
23	VSP1104PB038A	J	Speaker, x2	AK
24	XEBSN40P10000	J	Screw, x8	AB
25	QCNW-E250WJQZ	X	Connecting Cord	AX
26	QCNW-E251WJQZ	X	Connecting Cord	AG
27	QCNW-E268WJQZ	X	Connecting Cord	AH
28	QCNW-E269WJQZ	X	Connecting Cord	AH
29	QCNW-E270WJQZ	X	Connecting Cord	AK

CABINET AND MECHANICAL PARTS



CABINET AND MECHANICAL PARTS (Continued)

Ref. No.	Part No.	★	Description	Code
30	QEARZA097WJZZ	X	Grounding Part	AB
31	XBBS930P05000	J	Screw, x6	AA
32	XBBS940P05000	J	Screw, x4	AB
33	XBBS940P08000	J	Screw, x1	AB
34	XBBS940P25000	J	Screw, x4	AB
35	XBPS730P08JS0	J	Screw, x8	AB
36	XBPS930P08000	X	Screw, x1	AA
37	XEBS930P08000	J	Screw, x2	AA
38	XEBS940P16000	J	Screw, x11	AB
39	XEBSN30P10000	J	Screw, x2	AA

SERVICE JIGS *(USE FOR SERVICING)*

Ref. No.	Part No.	★	Description	Code
	QCNW-D721WJQZ	J	Extension Cable 26-pin, x3 (SC5201-P5002) (SC5202-P5003) (SC5203-P5004)	CH

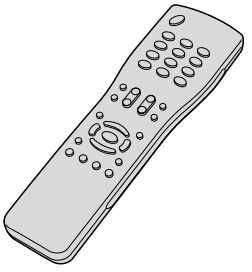
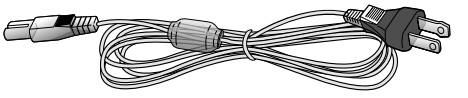
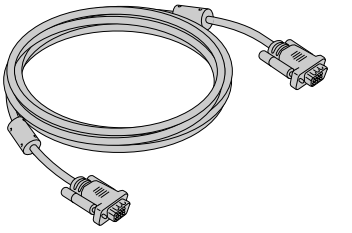
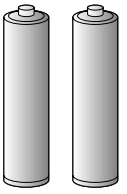
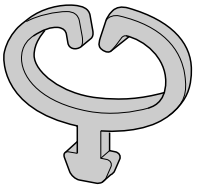
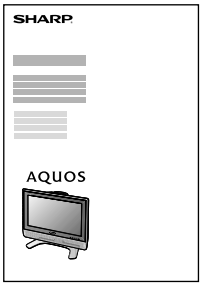
SUPPLIED ACCESSORIES

Ref. No.	Part No.	★	Description	Code
X1	LHLDWA002WJSB	J	Cable Clamp, x1	AD
⚠ X2	QACCDA038WJPZ	J	AC Cord	AL
X3	QCNWGA050WJPZ	J	RGB Cable	AR
X4	RRMCGA381WJSA	X	Remote Control Unit	AR
X5	TCADEA126WJZZ	X	Questionnaire Card	AC
X6	TiNS-C219WJZZ	X	Operation Manual	AX
X7	*Not Available*	–	"AAA" size Battery, x2	—

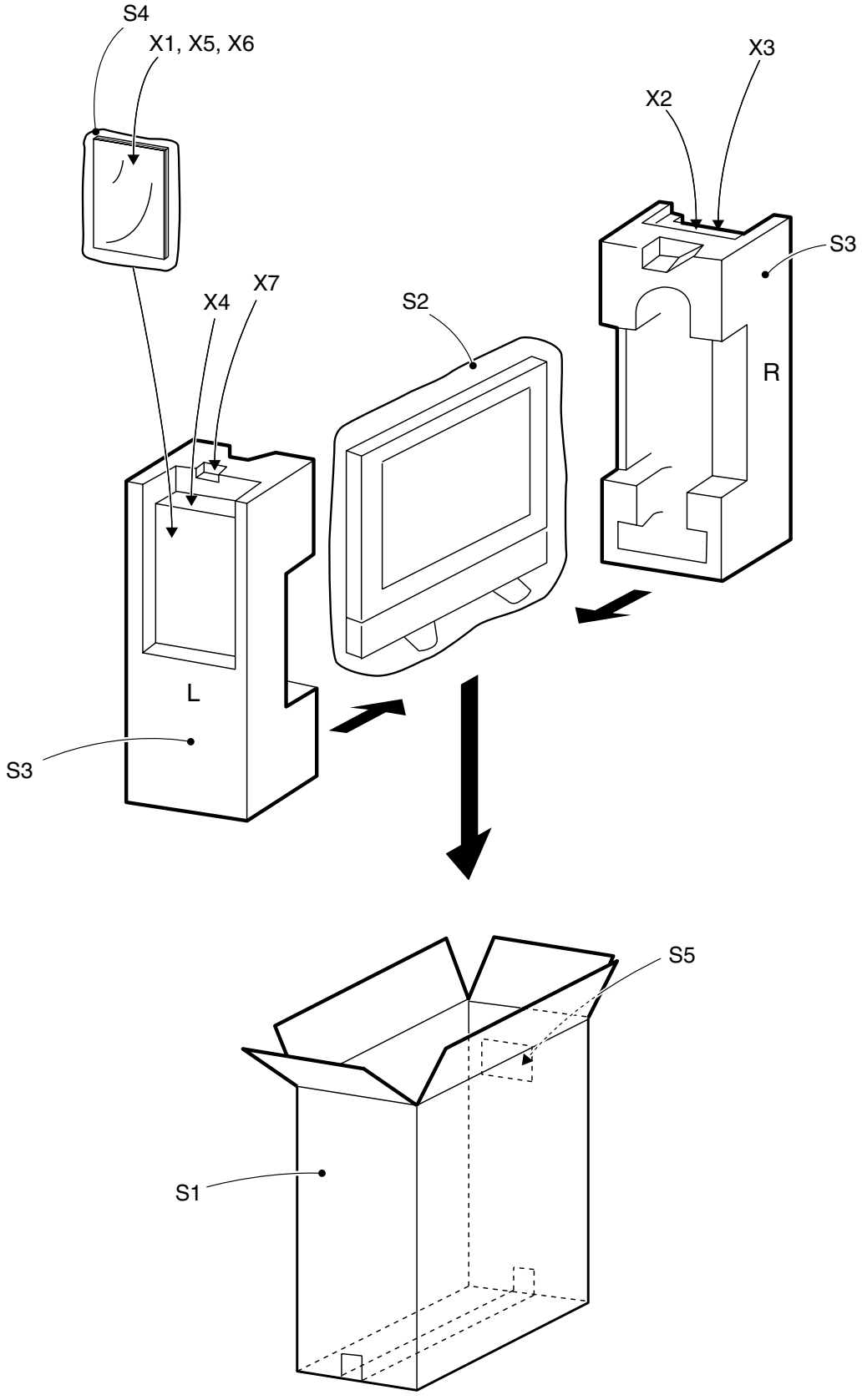
PACKING PARTS *(NOT REPLACEMENT ITEM)*

Ref. No.	Part No.	★	Description	Code
S1	SPAKCC420WJZZ	–	Packing Case	—
S2	SPAKPA609WJZZ	–	Wrapping Paper	—
S3	SPAKXA938WJZZ	–	Buffer Material	—
S4	SSAKA0101GJZZ	–	Polyethylene Bag	—
S5	TLABKA009WJZZ	–	No. Label	—

Supplied Accessories

Remote control unit	AC cord	RGB cable
X4 	X2 	X3 
"AAA" size batteries (x2)	**Cable clamp**	**Operation manual**
X7 	X1 	X6 

PACKING OF THE SET



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TQ1991-S
Mar. 2006 Printed in Japan

Design and Production Information	
Design	: NSEC
Production	: SEMEX

MI. KG

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